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A REVIEW OF SELECTED STUDIES ON WORLD HUNGER

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STAFF REPORT

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LETTER OF TRANSMITTAL

To: Members of the Select Committee on Hunger.
From: Mickey Leland, Chairman.

I commend to your attention the enclosed staff report "Review of Selected Studies on World Hunger." This two-part review of selected studies on hunger in the United States and abroad has been assembled by Vivian Gabor and edited by Catherine Jensen of the majority staff, and reviewed by Dr. James Weaver, Professor of Economics, The American University; Dr. Eileen Kennedy, International Food Policy Research Institute; Dr. Barry Popkin, Professor, University of North Carolina, School of Public Health, Department of Nutrition; and, Ms. Lynn Parker, Registered Dietitian, Food Research and Action Center. Their assistance in this endeavor is deeply appreciated.

This review has been prepared at the recommendation of committee members and focuses on studies which offer specific interventions directly impacting on the lives and nutritional status of the poor worldwide.

Sincerely,

MICKEY LELAND, *Chairman.*

PREFACE

This staff report is a two-part review of selected studies on hunger in the United States and around the world. Part I is a narrative reviewing and analyzing major reports on: (1) the extent of hunger and the effectiveness of food and nutrition programs in the United States; and (2) the extent of world hunger and major international programs and policies designed to alleviate world hunger. Part II is an annotated bibliography of all studies on domestic and international hunger reviewed by the Select Committee on Hunger.

There are many and diverse causes of hunger in the world, and a plethora of suggested responses. The narrative in Part I does not attempt to give full consideration to each type of anti-hunger response. It does not, for instance, explore in detail the impact of agriculture production policies in less-developed countries, which clearly have an enormous impact on poor and hungry people. Such a comprehensive review was published by the Congressional Research Service in 1984 (Feeding the World's Population: Developments in the Decade Following the World Food Conference of 1974, report prepared for the House Committee on Foreign Affairs). Part I also does not explore in depth the potential of small-scale technology for increasing agricultural productivity in less-developed countries. This subject was reviewed recently by the Office of Technology Assessment (Africa Tomorrow: Issues in Technology, Agriculture, and U.S. Foreign Aid, December 1984, report prepared for the House Select Committee on Hunger).

Although the narrative does not discuss all anti-hunger issues, it does focus on specific interventions which can have a direct impact on the lives and nutritional status of the poor in the United States and worldwide.

The annotated bibliography of Part II is comprised of 383 studies on domestic and international hunger, limited to major studies conducted over the last 10 years. Although all references in Part I are included in this bibliography, many additional studies are annotated. The bibliography is organized to help the reader find specific studies of interest. Within the domestic and international sections the entries are divided into two subsections: one containing studies on the extent of hunger (including those discussing measurement of the critical indicators of hunger), and one including studies on major programs and policies designed to alleviate hunger. The bibliography is further subdivided into specific program and policy titles.

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PART I: NARRATIVE

HUNGER IN THE UNITED STATES

Extent of Hunger

INTRODUCTION

This section summarizes the findings of major national and local surveys on the extent of hunger in the United States. It serves as an overview of the methodology used in documenting hunger and as a compilation of the results. Only data which are strongly associated with undernutrition have been included below: poverty indicators, increased demand for emergency food assistance, and health and nutrition indicators. These indicators were derived from the two-fold definition of hunger adopted by the President's Task Force on Food Assistance: the "physiological effects of extended nutrition deprivation" or "the inability, even occasionally, to obtain adequate food and nourishment."(*168*)

POVERTY INDICATORS

Definition

The official U.S. poverty level is based on the cost of the U.S. Department of Agriculture (USDA) economy food budget—the lowest cost "nutritionally adequate" diet—multiplied by three to allow for other necessary expenses such as shelter and clothing.(*50*) National and local hunger surveys often utilize this measure as an index of a household's food buying power and, thus, its ability to consume a nutritionally adequate diet.

One cannot deduce from the poverty statistics summarized below that each American in poverty is hungry. Nevertheless, being in poverty in the United States, by its very definition, indicates inadequate income to meet the necessary expenses of life. Clearly those Americans whose income falls below poverty level are at risk of having no money to buy food and, thus, many suffer from occasional or chronic hunger.

Extent

According to the poverty statistics of the U.S. Census Bureau, the number of Americans living in poverty increased 35 percent from 1979 to 1983. It increased from 26.1 to 35.3 million persons in poverty.(*6*) When noncash food and housing benefits are counted as income, for the same years, the Census Bureau found that the number of persons in poverty rose between 35 and 38 percent, depending on the formula for calculation and the variables included.(*5*) The increase in poverty occurred during the same period that

there were decreases in in-kind Federal low-income assistance programs.

Infants, children, and single mothers who have biologically increased nutritional needs, are among the groups who fell disproportionately into poverty. In 1983, over one in five or 13.8 million children lived in poverty, including nearly two in five Hispanic children and one in two black children. In addition, 36 percent of all single women lived in poverty households.(*6*)

The "poverty gap", which measures the severity of poverty and, thus, the food buying power of poverty households, was documented by the Committee on Ways and Means of the U.S. House of Representatives. They found the "aggregate poverty gap"—the amount of money required to bring the annual incomes of poor American households up to the poverty threshold—increased $2.2 billion from 1980 to 1982 to total $43.8 billion. This, they calculated, brought the average income of the poor 8 percent farther below the poverty line than in 1980. The average adult in poverty now required $1,300 to fill the gap, that is, to bring them up to the threshold.(*51*)

Major reports on the Aid to Families with Dependent Children (AFDC) and Food Stamp Programs have determined that these income maintenance programs do not close the "poverty gap".

In examining the effects of the Omnibus Reconciliation Act (OBRA) budget cuts of 1981 on employed AFDC recipients the U.S. General Accounting Office (GAO) found that the cuts in this program had decreased the food purchasing power of many recipients with working heads of households. They reported that these families were more often "having to get food from charity, * * * running out of food and having no money to buy more."(*69*)

Surveys of local private nonprofit emergency food programs also found that food stamps do not provide sufficient food for many working and nonworking recipients. They have consistently reported that many food stamp recipients run out of stamps before the end of the month, and often as early as the second or third week.(*19, 20, 26*)

The assumption that a poverty household has one-third of its income available for food—underlying the Federal definition of poverty and the income eligibility guidelines for cash, food, and other Federal assistance—has been questioned by several hunger surveys. Household expenditure data from the New York State Hunger Watch report provided data from participants in emergency food programs. They demonstrated that poor people needed more than one-third of their income to buy groceries. In fact, they discovered that participants were spending almost 70 percent of their income on groceries.(*26*)

This local data parallels the national findings of the U.S. Department of Agriculture. In their 1979–80 Nationwide Food Consumption Survey, Food Consumption and Dietary Levels of Low-Income Households, November 1979–March 1980, Preliminary Report No. 10, they reported that low-income households spent more than one-third of "poverty" level dollars (equal to the Thrifty Food Plan—the maximum food stamp allotment) on food. The actual average money value of food bought for home use was $14.58 per week, an amount that is 20 percent higher than the maximum food stamp allotment per person. The food bills were highest for those living in

the Northeast and Western regions of the United States, and in central cities nationwide.(*25*)

USDA has noted the nutritional inadequacy of the Thrifty Food Plan as a regular food budget for low-income persons. In the April 2, 1980 issue of the Federal Register the Department said of the Thrifty Food Plan: "The average food purchaser, without specific nutritional skills and training, would find it difficult to make the food choices which provide an adequate diet on the amount of money which represents the cost of the Plan."

INCREASED DEMAND FOR EMERGENCY FOOD ASSISTANCE

Along with increased poverty rates and benefits insufficient to purchase a month's worth of groceries, recent hunger surveys often used the increase in demand for emergency food assistance as an indicator of increased hunger and malnutrition.

The President's Task Force on Food Assistance found that private charitable organizations are becoming an increasing part of the food assistance network for low-income persons.(*168*) Studies from State and local surveys, congressional hearings and the GAO's report on Public and Private Efforts to Feed America's Poor(*163*), have all documented an increased demand for emergency food assistance faced by the growing network of private charitable emergency food providers. One such report by the U.S. Conference of Mayors surveyed eight major metropolitan areas. They found an average increase in demand of 71 percent in 1983.(*64*) In Rhode Island most feeding centers served 75 percent more persons from January 1983 to January 1984.(*161*) The 1983 Harvard University School of Public Health study of poverty and health in New England reported increases ranging from 40 percent to a more than ten-fold increase in emergency food requests.(*12*)

The above mentioned reports by the GAO and the U.S. Conference of Mayors characterize the new participants coming to emergency food programs in the early 1980's as the "new poor". GAO described these persons as:(*163*)

> * * * individuals who were employed and perhaps financially stable just a short time ago. As contrasted with the chronically poor, more of them are members of families, young and able-bodied * * *. They now find themselves without work, with unemployment benefits and saving accounts exhausted, and with diminishing hopes of being able to continue to meet their mortgage, automobile, and other payments * * *.

While the private sector in general was increasing emergency food assistance, witnesses testified at congressional hearings across the Nation that the supply was not able to meet the demand.(*17*) In Chicago, for example, 41,000 people could not be served because the food available to the centers was insufficient to meet the nine-fold increase in demand.(*17*) The Center on Budget and Policy Priorities' 1983 survey of 181 emergency food programs and the Food Research and Action Center's survey of food pantries across the Nation also found that in 1984 the demand extended far beyond the food supply. It was reported that as a result of inadequate pri-

vate food supplies the majority of emergency food providers had to routinely limit how often they could give food to each hungry person.*(2, 20)*

A more recent report for the first quarter of 1985 by the U.S. Conference of Mayors surveyed 21 cities across the Nation and found that in 70 percent of the cities emergency food facilities are unable to meet the demand. On average 24 percent—nearly one-fourth—of the emergency demand goes unmet. Over 60 percent of the cities are forced to turn people away. Twenty of the cities reported that the number of families and children requesting emergency food assistance during the last year has increased, on average by 35 percent.*(67)*

HEALTH AND NUTRITION INDICATORS

The health and nutrition effects of hunger in the United States are generally not the severe protein and calorie deficiency diseases of the developing countries. Nevertheless, the long term inadequate intake of essential nutrients causes infant death and diseases even in our wealthy Nation. Undernutrition per se is not a common primary diagnosis in the United States. The national health statistics most often include the health and nutrition consequences of undernutrition, not the underlying cause of inadequate food intake. The most commonly documented health statistics which indicate inadequate food intake among persons in the United States are: Low birthweight and infant mortality, growth stunting, iron-deficiency anemia, and inadequate nutrient intake.

Low birthweight and infant mortality

Low birthweight (LBW) infants are those infants weighing less than 5½ pounds at birth. They have been found to be at greater risk of suffering severe physical and developmental complications such as mental retardation, birth defects, delayed speech, autism, cerebral palsy, epilepsy, learning difficulties, and chronic lung problems.*(112)* The single most important predictor of infant mortality is low birthweight. LBW infants account for two-thirds of all neonatal deaths (under 28 days) and over 50 percent of deaths in the first year of life.*(58)*

A woman's nutritional status both before and during pregnancy significantly affects her chance of delivering a normal weight infant. An infant born to a woman who is unable to obtain a nutritionally adequate diet is at greater risk of being born LBW, and of dying before its first birthday. LBW rates and infant mortality rates are used in national, State, and local nutrition surveys as strong indicators of undernutrition among infants and women in their reproductive years.

Infant mortality rate (IMR)

The prevalence of infant deaths per live births is statistically expressed as the infant mortality rate, defined as infant deaths per 1,000 live births. The National Center for Health Statistics (NCHS) reports that in 1982, 42,401 infants died before their first birthday, a rate of 11.5 per 1,000 live births. Infant mortality rates in this country have been declining at a rapid pace since the late

1960's.*(44)* Provisional data published by the U.S. Department of Health and Human Services (DHHS), reveal that there has been a slowdown in the rate of decline of infant mortality. According to a December 1984 report by the Department.*(68)*

> The provisional IMR for 1983 (10.9) declined by only 2.7 percent from the 1982 rate, and well below the annual average decline of 4.6 percent for the previous decade, and the second lowest decline since 1971.
>
> The IMR for January–June 1984 was 11.0: Only 0.9 percent below the rate for the comparable period in 1983.

Further, the report stated:

> These successively small declines are indicative of a slowdown in the infant mortality decline that we have not experienced since the plateau in infant mortality between 1955 and 1965.

Not only has the long-term decline in IMR slowed, the report noted that great disparities in IMR's between blacks and whites remain. Since the NCHS began monitoring race specific IMR's, black newborns have been almost twice as likely as white newborns to die before their first birthday. In 1982, the most recent year for which national race specific IMR's are available, black infants died at a 94 percent higher rate than white infants (19.6/1,000 and 10.1/1,000, respectively.*(44)* The final 1982 IMR's from 16 cities and urban counties reveal that the black IMR was higher than twice the white IMR in 10 locations; it was three times the white IMR in Charleston, SC, and nearly four times the white IMR in Washington, DC.*(60)*

On the State and local level several studies report that the improvements in national IMR's even if slowing down, conceal State and local IMR's which are worsening. According to the Children's Defense Fund, the total IMR's for 14 States have increased, contrary to the national trend. From 1981–82, 14 States had increased death rates for all infants, and 20 States (including the District of Columbia) out of the 40 States with IMR data by race had increased infant death rates for nonwhites.*(27)* The Southern Governors' Association Regional Task Force on Infant Mortality reported that among the Southern States, the IMR's rose or experienced no improvements in seven States between 1981 and 1982.*(61)* While annual variations between State and national rates are expected statistically, the trend between 1981 and 1982 was not unique. The Children's Defense Fund reports that between 1982 and 1983, 10 States experienced an increase in IMR's. This represents 25 percent of all States whose vital statistics data was available to the Fund.*(27)*

While the United Nations categorizes the United States as a low-infant mortality country, our IMR ranks poorly in comparison to other industrialized nations. In the State of the World's Children, 1984, the United Nations reported that the IMR in the United States was worse than in 15 other nations including Hong Kong, Spain, Ireland, and Sweden.*(237)*

Low birthweight rate

U.S. low birthweight rates have also been improving steadily, though more slowly than IMR's, since the early 1960's. According to the U.S. DHHS, the incidence of LBW "has remained static since 1980."*(68)* In 1982 there were 248,104 infants born weighing less than 5½ pounds,*(43)* and consequently at risk of early death and long-term handicapping health conditions.

According to the 1982 Final Natality Statistics of the NCHS, the relative difference between black and white LBW rates is greater than that for IMR. In 1982, 12.4 percent of black infants were born at LBW, compared to a LBW rate of 5.6 percent for white infants. *(43)* Health, United States, 1981, published by DHHS, concluded that this higher rate of LBW among blacks in the United States is the primary cause of the higher black neonatal mortality rate compared to that of white infants.*(30)*

The 1979 Surgeon General's Report on Health Promotion and Disease Prevention notes that there is a great disparity in low birthweight rates between racial and socioeconomic groups. However, the report explains that the disparity between black and white birthweights is related to social class and not ethnicity: "Analyses of birth weight distribution according to socioeconomic status among homogeneous ethnic populations reveal a clear relationship between birth weight and social class; the birth weight of black infants of higher socioeconomic status is comparable to that of whites."*(58)*

From an international perspective, relative to other developed nations, our Nation's LBW rate ranks poorly. Comparing the United States to nine other selected industrialized nations, the U.S. Department of Health and Human Services reported that our Nation ranked second highest in the proportion of low birthweight infants born each year.*(58)*

Growth stunting among children

Growth stunting among children in the United States is a primary medical indicator for diagnosing chronic malnutrition. The technical definition of "growth stunting" among children is height for age below the fifth percentile of the U.S. standard, established by the NCHS. Deficiency of total caloric intake, protein, or of any essential nutrient during the rapid growth periods of childhood deprive the body and may result in retarded bone growth and formation. As a result of this delayed bone development a child can become stunted in growth.

The nutrition surveys assessing the extent of child hunger examine individual children within communities or populations to determine the prevalence of growth stunting. A prevalence above 5 percent indicates that the children in that community are growth stunted at an abnormally high rate and are medically at risk.

The Centers for Disease Control (CDC) Pediatric Nutrition Surveillance System of 1982 (which surveyed medical records of approximately 336,000 low-income children attending public health clinics in 28 States and the District of Columbia), and the Massachusetts Nutrition Survey (which surveyed medical records of 1,429 low-income children who utilized community pediatric health clin-

ics), reported growth stunting at an abnormally high prevalence—both reported approximately 10 percent of the children aged 3 months to 5 years were growth stunted, which is twice the national expected rate.(*8, 36*) These statistics may understate the prevalence of growth stunting among low-income children as they did not include any findings on children who had not come to a health clinic—a population that may be at greater risk of hunger and its negative health effects. A fall 1983 study of children under age 5 admitted to Boston City Hospital's emergency room—including those who did not routinely receive preventive health care—found the prevalence of growth stunting to be higher, at nearly three times the standard rate.(*12*)

Among many minority populations, the problem of chronic malnutrition manifested as childhood growth stunting is more widespread. The Centers for Disease Control's 1982 national pediatric nutrition survey found growth stunting among 4-year-old Hispanic and Native American children to be three times the national expected rate.(*63*) Research on the nutritional status of minority children finds that such high rates of growth stunting are not race related, but more directly related to socioeconomic characteristics,(*18, 22, 171*) strengthening the association between poverty, hunger, and growth stunting.

Iron-deficiency anemia

Anemia is an abnormal physiologic condition in which the concentration of hemoglobin, the iron carry ng portion of red cells in the blood, is below normal. In this country a deficiency of iron is the primary cause of anemia among infants, children, teenagers, and women. The nutritional and medical literature associates iron-deficiency anemia with a wide variety of physical and mental health problems including dizziness, decreased response to infection, and muscle fatigue. Recent studies also strongly suggest a causal relationship between iron-deficiency anemia and impaired cognitive development and learning in children.(*53, 54, 55*)

The 1982 Centers for Disease Control nutrition survey of low-income children, found that one in seven white 2–5 year olds, over one in six black 2–5 year olds, and over one in five Hispanic 2–5 year olds had hematocrits below normal—indicating probable iron-deficiency anemia.(*8*) In the Massachusetts Nutrition Survey nearly one in eight children of all races were diagnosed as anemic.(*36*) In testimony before the U.S. House of Representatives Select Committee on Children, Youth, and Families, Dr. Ehlenger, of Minnesota, reported that 20 percent of low-income mothers and children (who were eligible for, but not yet enrolled in the local Federal Supplemental Food Program), were diagnosed as anemic.(*111*)

National food consumption surveys of children corroborate the above clinical findings that anemia is high among low-income children. They report that the diets of children in the lowest income groups are those most frequently deficient in iron. The nutrition literature finds that the anemia among low-income children is associated with iron deficiency and not other nonnutritional causes.(*55*)

Inadequate nutrient intake

The most direct assessment of hunger related malnutrition, before it has manifested in diagnosable health problems is inadequate dietary intake. Chronic dietary deficiencies lead to low body nutrient stores. Low nutrient stores result in increased susceptibility to infections, in growth stunting among children, or in low birthweight and infant mortality for the newborn of the undernourished mother.

Findings of the USDA's Nationwide Food Consumption Survey of low-income households in 1979-80 demonstrated that the diet of nearly 60 percent of these households did not meet the National Academy of Science's Recommended Dietary Allowances (RDA's) for all eleven nutrients studied. With regard to calorie intake, the most widely accepted standard for evaluating adequacy of food intake, over one-fourth of the low-income households did not consume sufficient calories to meet their recommended dietary needs.(*99*)

More recent State and local food consumption surveys have also found a large majority of low-income persons to have inadequate dietary intake. The New York State Hunger Watch survey, for example, collected data from participants at health, social service, and emergency food assistance centers. Their findings demonstrated that the majority of participants had diets placing them at risk of chronic malnutrition. Breaking the data down by groups the survey included the following nutritional intake data:(*26*)

84 percent of the men had diets that fell below minimum recommended daily caloric intake.

72 percent of the women had diets that fell below minimum recommended daily caloric intake.

70 percent of the pregnant women had diets deficient in both caloric and protein intake.

The nutrient intake of low-income children was assessed by dietary interviews at the children's clinic of the Cook County Hospital in Chicago in 1983. Interviews with parents of children revealed that 48 percent of the children under 2 had nutritionally deficient diets. Their diets were rated as inadequate relative to nutrient requirements for maintaining health, and for supporting the growth and development critical to the stage of early childhood. The main nutritional deficiences for infants included inadequate amounts of formula or formula that had been overdeluted.(*33*)

Effectiveness of Food and Nutrition Programs

CHILD NUTRITION PROGRAMS

The four major nutrition assistance programs for children are the School Breakfast Program, the School Lunch Program, the Child Care Food Program, and the Summer Food Service Program. Following is a brief description of the operation of each program and the role each plays in improving the nutritional status of participants.

School Breakfast Program

The School Breakfast Program receives both Federal funds and commodities from the U.S. Department of Agriculture (USDA). The program "enables low-income students to get meals at no cost or at a reduced price, and allows schools to charge other students somewhat less than the full cost of the meal provided."*(167)*

Several studies show that the School Breakfast Program, increases the likelihood that children will consume a morning meal.*(81)* The program is found predominantly in schools located in low-income areas. According to fiscal year 1984 U.S. Department of Agriculture participation figures, the program serves primarily poor children—91 percent of the children who participate in the Breakfast Program are from families which are eligible for free or reduced-price meals (currently children in families with incomes at 185 percent of the income poverty guidelines qualify for reduced-price lunch; children in families with incomes at 130 percent of the income poverty guidelines qualify for free lunch).

The National Evaluation of School Nutrition Programs notes that children who eat breakfast are substantially better nourished than children who do not. In addition, this study points out research demonstrating that students who have consumed breakfast pay better attention in class.*(81)*

Low-income school breakfast participants between the ages of 6 and 11 have been shown to consume 10 percent more of the Recommended Dietary Allowance (RDA) for calories than children who do not participate.

While the National Evaluation of School Nutrition Programs pointed out the need for improved nutritional quality of the school breakfasts, an analysis of the 1977–78 Nationwide Food Consumption Survey data found that children participating in the School Breakfast Program "consume 25 percent more of the RDA for calcium; 30 percent more of the RDA for riboflavin; 15 percent more of the RDA for vitamin B6; and 85 percent more of the RDA for vitamin C, relative to the daily intakes of children who eat other types of breakfasts."*(75)*

The School Breakfast Program increases the amount and value of food available to a family and not the disposable income of the family; thus it serves as a food supplementation rather than an income supplementation program. According to the National Evaluation study this program has proved to be more efficient than the provision of additional cash in accomplishing food supplementation goals.

The studies and reports reviewed offered several recommendations for improving the School Breakfast Program. Among them are proposals to:

Improve the quality of the meal pattern for the program to provide more vitamin B6, vitamin A, and iron;*(76)* and

Require schools where one-quarter or more of the children receive free or reduced-price lunch to institute a School Breakfast Program.*(167)*

School Lunch Program

Like the School Breakfast Program, the School Lunch Program receives Federal funds and commodities from USDA. While this program delivers benefits to substantial numbers of poor students, the U.S. Department of Agriculture's annual participation data finds that almost half of the program participants are from families with incomes above 185 percent of the Office of Management and Budget (OMB) proverty line.

Judging from the nutrient intake of students, the School Lunch Program clearly provides meals that are superior to the lunches received by those students not participating in the program. A 1981 USDA study found that students from low-income households (those qualifying for free and reduced-price meals), are dependent upon the School Lunch Program for between 34 and 49 percent of their daily nutrient intake.(*75*)

As is the case with the School Breakfast Program, the School Lunch Program is more efficient in accomplishing food supplementation goals than the provision of additional cash benefits to the participant's family. The National Evaluation of School Nutrition Programs disclosed that an increase of between $9 and $10 of direct cash income would be needed to have the same effect on food expenditures as $1 of School Lunch Program subsidy.(*81*)

Increasing free meal eligibility from 130 percent of poverty income guidelines to 135 percent and reduced-price eligibility from 185 to 195 percent has been recommended as a means for providing more low-income children with the nutritional benefits provided by these meals.(*167*)

Child Care Food Program

Child Care Food Program (CCFP), sponsors receive a Federal reimbursement for the meals (breakfast, lunches, dinners, or snacks), which they provide to participating children. In addition, sponsors may receive USDA commodities or cash amounts equivalent to the commodities they would receive.

Federal nutrition standards for the meals served by CCFP sponsors have a positive impact on the quality of meals in centers and family day care homes. A USDA evaluation of the Child Care Food Program found that "for every measure examined, participating centers have statistically significantly higher levels of meal quality than nonparticipating centers."(*74*) This study also noted that participating facilities served meals containing foods of higher quality and variety than nonparticipants. Participating centers were found to serve more meals and snacks than nonparticipating centers, particularly breakfasts. Child Care Food Program sponsors also provided snacks which contributed greater amounts of calories and nutrients to the overall diet.

A 1983 evaluation of the Child Care Food Program, prepared for the Department of Agriculture, noted that "the eligibility criteria for day care centers serve to target program benefits to low-income children." The researchers found that close to 84 percent of the children from families with annual incomes of less than $6,000 who were enrolled in day care centers attended nonprofit centers. They also found that "participating centers enroll a substantially higher

proportion of children from families with annual incomes below $12,000 (54 percent in participating programs versus 17 percent in nonparticipating programs)."*(74)*

Legislative suggestions for improving the nutritional benefits of the program include restoring the provision to allow that three meals and two snacks be served to children who are in day care for all meals.*(76)*

Summer Food Service Program

This program is designed to feed children (up to age 18), when meal services available during the school year are not in operation. Meals provided through the program have the same nutrition standard as meals provided through the School Lunch Program (as noted in the School Lunch Program section, low-income participants are dependent upon this meal for between 34 and 49 percent of their daily nutrient intake), and are served free of charge. Without the Summer Food Service Program, many low-income children would be without the nutritional benefits of this meal during the 3 months that school is out of session.

Until 1981, churches, religious, and other nonprofit organizations were allowed to sponsor the Summer Food Service Program. Presently, sponsorship is restricted to programs operated by school systems or local governments. A report prepared by the Children's Defense Fund found that participation in the program has dropped by approximately 500,000 children since 1981.*(164)* In 1983, approximately 1 million children participated in the program.

One major recommendation for expanding the program is to allow private, nonprofit sponsors who serve areas where one-third of the population are low-income to participate in the program.*(167)*

ELDERLY FEEDING PROGRAMS

The Congregate and Home-Delivered Meals Programs provide prepared meals for the elderly. They were made part of the Older Americans Act in 1972. It is the intent of these programs to improve the diet of older persons, to foster social interaction, and to facilitate the delivery of social services to their participants.

The programs are open to all persons 60 years of age or older, regardless of income. However, Federal regulations emphasize that low-income, minority, and individuals in poor health and socially isolated be given priority enrollment.

Congress, in creating these programs, recognized a number of factors associated with the inadequacies of the diets of many of our elderly. Among the most prominent were: (1) many elderly persons have limited mobility and this creates an obstacle for them in buying and preparing food; and (2) many elderly individuals lack the monetary resources necessary to afford meals adequate in nutrition.

Congregate meals are served in a social atmosphere—often in senior citizen centers or in churches. In many instances the meal service is provided in conjunction with educational or recreational activities. Home-delivered meals are targeted to home-bound elderly persons who are too ill to participate in the congregate program.

Participation in elderly feeding programs has been associated with a large and significant increase in elderly nutrient intake.

A May 1983 report, conducted by Kirschner Associates for the Administration on Aging found that 61 percent of the congregate participants attend meal sites three or more times per week and 82 percent of the home-delivered meal recipients receive a meal in their homes five times per week.(*88*)

Several State and local studies have reported long waiting lists for both their Congregate and Home-Delivered Meal Programs. In May 1983, the California Senate Subcommittee on Aging issued a report reviewing the unmet need for Senior Nutrition Site Meals in the State betwen 1981 and 1983. The report stated that 63,364 requests for meals at Senior Nutrition Sites had to be denied due to lack of funding. In addition, 9,083 persons had to be placed on waiting lists for home-delivered meal service. Many studies have shown that this situation is not unique to California—that similar conditions exist at different levels of magnitude almost everywhere.(*38, 62, 89*)

The need for programs oriented to the elderly will continue to grow. The 1983 Census reports that during the past 20 years, the age 65 and over population grew twice as fast as the rest of the population. The study projects that this group will continue to grow at a rate more rapid than the total population for at least five more decades.

The most frequently noted suggestions for revising the programs so that they can facilitate the growing number of individuals needing services are:

Increasing assistance provided under title III–c of the Older Americans Act for an ongoing program of surplus commodities distributed to senior nutrition sites;(*89*)

Targeting the nutrition programs to the elderly with the greatest food deficiencies;(*62*) and

Increasing funding for title III–c to increase the number of needy elderly who participate in the Home-Delivered or Congregate Meals Programs.(*9, 38, 62*)

FOOD STAMP PROGRAM

The Food Stamp Act of 1964 established the Food Stamp Program as a permanent program extending participation to any State wishing to take part. In 1971, Congress—in efforts to increase program participation—established uniform national standards of eligibility and required that States inform low-income people about the program. Finally, in 1974, the program was expanded nationwide and all States were required to offer food stamps to low-income individuals.

In 1977, under the direction of the Field Foundation, six teams of physicians traveled across the country to investigate hunger and poverty. The report summarizing the findings of their investigation noted that "the Field Foundation doctors and other observers believe that food stamps are making a crucial difference in improving the quality of the lives of many poor Americans."(*32*)

In 1979, the purchase requirements for the Food Stamp Program were eliminated. National samples of elderly low-income individ-

uals taken from the 1977–78 and 1979–80 low-income surveys were used to examine the effects of eliminating the purchase requirements on changes in elderly participation in the program. Large increases in Food Stamp Program participation by the elderly were associated with the elimination of the purchase requirements.(*93*) Unfortunately the literature is consistent in the finding that large proportions of low-income elderly households are not served by the Food Stamp Program.

The Food Stamp Program is designed to provide monthly benefits to assist low-income households in purchasing the food that they require to maintain a sound nutritional status. In recent years, this program has undergone numerous revisions. A 1983 U.S. Department of Agriculture report notes that there were more than 95 separate legislative changes in the program between 1981 and 1982. Of these, 39 modified eligibility criteria or benefit levels.

A USDA study of the characteristics of food stamp participants (released in June 1984), reported that 95 percent of the participating households had gross incomes below the poverty line and 42 percent of the participating households had gross incomes below 50 percent of the poverty line.(*102*) USDA's 1985 report on program participation finds that more than 50 percent of the program participants are children, 9 percent are elderly, and 2.5 percent are disabled.

According to USDA, the average food stamp benefit for fiscal year 1985 will be $45.77 per person per month—or about 50.6 cents per person per meal. The maximum allotment in October 1984 was 70.2 cents per person per meal. Approximately 8 percent of all participating households receive the $10 minimum benefit. One person minimum benefit households receive 11 cents per meal.

The maximum food stamp allotment per household are based on USDA's Thrifty Food Plan. It is the least costly of four food plans developed by the Human Nutrition Information Service of USDA. The dollar value of the plan is based on three major factors: (1) food consumption patterns of low-income Americans, (2) nutritional requirements, and (3) the lowest cost food budget to purchase these requirements. The budget constraints of the plan are those determined by USDA in their Economy Food Plan—the predecessor of the Thrifty Food Plan. The Economy Food Plan was defined by USDA as a "nutritionally adequate diet for use when the cost of food must be lower than the average food expenditure of low-income families. It is essentially for emergency use."(*92*)

According to the USDA's 1977–78 Nationwide Food Consumption Survey, only 12 percent of low-income households spending at the full allotment level are obtaining 100 percent of their recommended dietary allowances and only 34 percent are getting at least 80 percent of these standards.(*99*)

Because the U.S. Department of Agriculture assumes that program participants spend one-third of their income on food, it is important to take into consideration the amount of resources a participant has available to supplement food stamp benefits. As a result of benefit reductions in a number of low-income assistance programs and increases in living expenses (that is, housing, utilities, et cetera), many participants have very little, if any, money to purchase food to supplement food stamp benefits. In addition, partici-

pants residing in the 17 States which tax food purchases, face even further reductions in the food buying power of the benefits they do receive.

As noted earlier, the Food Stamp Program was created with the intent of assisting low-income persons in buying food to enhance their nutritional status. In analyzing the effectiveness of this program in reaching this goal, attention must be given to the percentage of the eligible population receiving benefits. According to the Census Bureau, in 1982, approximately 34.4 million people in this country had incomes below the poverty line. In addition, nearly 12 million more Americans had incomes less than 125 percent of the poverty line. In fact, the number of people potentially eligible to participate in the program has grown with the increase of persons living in poverty. Yet, program participation does not reflect this. For example, the number of persons who fell into poverty between 1981 and 1982 was 2.58 million. Between 1981 and 1982, the food stamp benefit rolls increased by only 134,000.

Comparing 1983 Bureau of the Cenus data on poverty to the most recent U.S. Department of Agriculture's Food Stamp Program participation data it becomes clear that over 40 percent of the eligible population is not participating in the Food Stamp Program. The literature points out one factor contributing to this imbalance of eligible persons versus actual participants in the program. There is a lack of any requirement that information about the Food Stamp Program be disseminated to the public. Many people do not know enough about the program to apply for benefits. In 1983, the Food Research and Action Center conducted a survey of people in need of emergency food. Recipients at 27 food pantries in 14 States were interviewed to determined the reasons they were requesting emergency food assistance. One-quarter of those interviewed were unaware that they might be eligible to participate in the Food Stamp Program.*(19)*

Until 1981 Congress both mandated and funded "outreach" services. Since that time, there has not been a requirement for informing people about the availability, eligibility criteria, rules, and benefits of the program.

It has been noted in many studies that existing administrative procedures prevent a number of potentially eligible persons from participating in the program. The report of the President's Task Force on Food Assistance stated: "As things now stand, the system for establishing eligibility includes the following: The determination of net income incorporates a formula with five deductions, most of which require that several questions be answered. The determination of eligibility requires ten mathematical computations by food stamp officials. The application form and requisite worksheet cover nine pages of detailed questions."*(168)* The report noted that the predictable results of such a complex system were long, frustrating interviews, and disgruntled people in food stamp offices.

Several recommendations for enhancing the availability of program services and the adequacy of benefits have been made. Among those most frequently suggested are:

> Revising the number and amount of allowable deductions to more accurately reflect the true circumstances of low-income people;*(167)*

simplifying application procedures;(*168*)

reinstituting services to inform the public about the availability, eligibility requirements, and benefits of the program; (*167*) and

increasing monitoring of expedited issuance of food stamp benefits to assure compliance with Federal regulations.(*62*)

SUPPLEMENTAL FEEDING PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC) AND THE COMMODITY SUPPLEMENTAL FOOD PROGRAM (CSFP)

In 1972, Congress approved legislation establishing the Supplemental Feeding Program for Women, Infants, and Children (WIC). This program was created to provide for nutritionally vulnerable pregnant women, infants, and young children at crucial developmental periods. At inception, WIC operated as a 2-year pilot project funded at $20 million. The program provided food supplements, health screening, and nutrition education and services for pregnant, breastfeeding, and post-partum women, infants, and children under the age of 4.

In 1974, Congress expanded the program into a national health and nutrition program. By this time, benefits were being extended to 200,000 participants. Today, pregnant and nursing women, infants, and children up to age 5 who are low-income and at nutritional risk are eligible to participate in WIC. Most WIC food supplements are obtained through the use of vouchers in grocery stores. However, a number of participants receive food packages at WIC sites or receive them through home delivery.

A 1984 General Accounting Office (GAO) evaluation of major WIC effectiveness studies reported that fewer low birthweight babies are born to women who participate in WIC. This conclusion was based on a review of many studies which showed remarkable consistency in the level of positive effect of WIC participation on decreasing low birthweight. GAO concluded that "about 7.9 percent of the women participating in WIC gave birth to low birthweight infants compared to about 9.5 percent of the women in the non-WIC comparison groups."(*146*) This is a 17-percent benefit for WIC participants.

By decreasing the number of low birthweight babies born, the WIC Program concurrently reduces hospital costs. Low birthweight infants have a higher prevalence of developmental abnormalities such as blindness and deafness. WIC services appear to be even more cost effective if longer-term costs for care and treatment are considered.

In 1983 hearings before the House Select Committee on Children, Youth, and Families, Dr. Eileen Kennedy of the International Food Policy Research Institute discussed her earlier participation in a study at Harvard University which found that for every dollar spent on the WIC Program, there was a $3 savings in medical care costs. She continued by stating that "WIC is not just a supplemental feeding program. It really would appropriately be labeled an integrated health nutrition intervention because it stresses food plus nutrition education * * *."(*113*) In the Congressional Research Service's analysis of the Kennedy study it was stated that the hos-

pital costs assumed for low-birthweight infants were not based on actual data on the length of stays of infants of different weights. However, they note that "the program likely will be cost beneficial" if it reduces the incidence of low birthweight.(*108*)

A more recent study of the cost-effectiveness of the WIC Program, by the Missouri Department of Public Health, found for every dollar spent on WIC, within only 30 days of birth, 83 cents in Medicaid costs are saved.(*129*)

In other data on the cost effectiveness of the WIC Program, a 1984 Children's Defense Fund report stated that it costs approximately $30 per month to provide a complete WIC package for a pregnant woman. Participation in this program has been shown in many studies to reduce the incidence of low birthweight. It costs roughly $35 per month to provide an infant with a complete nutritional food package. It costs about $1,400 per week to hospitalize an infant for treatment of malnutrition.(*11*)

On June 29, 1983, Public Advocates filed an administrative petition with the U.S. Department of Health and Human Services. This petition, to reduce the incidence of low birthweight and resultant infant mortality, notes that current cost of providing neonatal intensive care and rehospitalization for low birthweight infants is $638,364,300. The petition projected that with comprehensive prenatal care and a reduction in the incidence of low birthweight, the cost of such care would be $90,199,040—a savings of more than $548 million.(*112*)

According to the U.S. Department of Agriculture, at the present time there are more than 10 million persons who meet WIC income criteria and are potentially eligible to participate in the program. Yet, only approximately 3 million persons are currently enrolled.

In fiscal year 1985, WIC appropriations totalled $1.5 billion. However, at this level and at the levels provided in recent years, many local programs are unable to serve all certified eligible persons. Of even greater consequence, many participants who relocate find that WIC Programs in their new places of residence cannot serve them because these programs are already serving the maximum caseload.

From city to city there is a wide variance of the percentage of eligible people receiving WIC services. For example, according to the Children's Defense Fund report, in 1983, Wilmington, Delaware served 17 percent of the eligible participants while San Antonio, Texas served 60 percent of the eligible population. However, on the average, benefits are provided to approximately one-third of the eligible population.(*11*)

Significant numbers of children have been falling into poverty in recent years. Census data show that in just 3 years—from 1979 to 1982—the percentage of children below the age of 5 who live in poverty jumped by over 46 percent (see Extent of Hunger section, above). Many of these children are at nutritional risk, yet they do not have access to the nutrition and health monitoring benefits of participation in the WIC Program.

The Commodity Supplemental Food Program also provides monthly food packages to pregnant and breast-feeding women, infants, and children up to 6 years of age. This program employs income eligibility guidelines identical to those used by WIC and in

some States eligible persons must also be at nutritional risk to participate. Two major differences between the WIC and the Commodity Supplemental Food Programs are that: (1) the Commodity Supplemental Food Program provides only for the direct distribution of food packages (in WIC there is the option for use of vouchers redeemable at grocery stores); and (2) the Commodity Supplemental Food Program is not required to offer health care to participants.

Presently, there are 28 Commodity Supplemental Food Programs operating in 12 States and the District of Columbia providing services to 150,000 clients. In fiscal year 1984 the value of commodities and administrative payments to distributing agencies totalled $46.3 million. The program had $13 million of carryover funds to be used in fiscal year 1985. (The program participation and cost data include the three CSFP Elderly Feeding Pilot Projects for low-income elderly persons established in 1981.)

Participation in the Commodity Supplemental Food Program, like participation in WIC, has a positive effect on birthweight, length of pregnancy, and length of newborn infants' hospital stay. Participation in the program is also associated with positive effects on low weight for age and particularly low weight for height—both of which are indicators of undernutrition.(*130*)

Clear evidence on the effectiveness of both the WIC and the Commodity Supplemental Food Programs have prompted numerous recommendations for their expansion to assure that the needs of those qualifying for participation are met. These recommendations include (*131*):

Funding the WIC and Commodity Supplemental Food Programs at levels which would allow the programs to serve at least 50 percent of the Nation's potentially eligible population;

Encouraging USDA to continue to look at the overall nutritional content of the WIC food package regulations to ensure that they meet the nutritional requirements of the program's target population and that they support the national "Dietary Guidelines"; and

Cooperation between USDA and State agencies to seek ways to increase the number of pregnant women served.

SURPLUS COMMODITY DISTRIBUTION PROGRAM

Background on commodity surpluses

Food surplus in the United States is that food produced which exceeds the domestic demand. Surplus food stocks are managed in the following ways: (1) exported through commercial sales, as concessional sales or donations; (2) stored in farmer-held reserves; and (3) kept in Government-held reserves.

Surplus stock levels alter from year to year, as farm income support policies and crop conditions change. According to a March 1984 Congressional Research Service report of USDA data, the following bulk commodities were held in the U.S. Government's Commodity Credit Corporation (CCC) inventory as surplus, uncommitted stocks:(*147*)

	Million bushels
Barley	8.3
Oats	1.3
Rye	1.2
Sorghum	18.4
Soybeans	14.7
Corn	92.7
Wheat	16.4
Rice (million hundredweight—equivalent to 100 pounds)	1.0

This same CRS report notes that the U.S. milk surplus is far larger than any of the other stocks, with production in 1983 running about 10 percent or more ahead of demand. In 1979 the CCC purchased about 1.1 billion pounds (milk equivalent) of surplus dairy products. U.S. Government dairy purchases burgeoned to 16.6 billion pounds in fiscal year 1983. As of May 25, 1984, the Congressional Research Service reports that the CCC held over 2 billion pounds of dairy products in uncommitted inventory:

	Million pounds
Butter	354.4
Cheese	845
Nonfat dry milk	1,379.8

The CCC—under the Agricultural Stabilization and Conservation Service—has the financial responsibility for the purchase and storage of Government-held commodities. Congress must appropriate funds to reimburse the CCC for the costs it incurs in managing these surplus commodities.

A 1983 report issued by the Food and Nutrition Service of the U.S. Department of Agriculture (USDA) reported that "the Federal Government incurs a cost of slightly more than 18 cents per pound of Government-owned commodity" before the commodity is donated to States for distribution.(*154*)

Milk price supports alone cost the Government $1.6 billion in fiscal year 1983, up from $244 million in fiscal year 1979. According to a General Accounting Office report on the quantity, cost for storage and spoilage of stored commodities, costs the Government for stored, unused, and spoiled commodities have been $1.42 million to date. However, according to USDA officials future deterioration problems may occur due to the 1983 increases in purchases of dairy products. Thus, losses in the future are expected to be higher as the current dairy inventory ages.(*156*)

Program effectiveness

The Agriculture and Food Act of 1981 authorized the use of CCC held stocks for distribution to individuals—through food banks—for use in home consumption. The first distribution of cheese took place in January 1982. At that time, 17 States received a total of 7.8 million pounds of cheese.

By the end of 1982, the Surplus Commodity Distribution Program had been expanded to all States. States were given the responsibility to determine eligibility guidelines for recipients and informed that they could receive an unlimited amount of the commodities available for distribution (which included nonfat dry milk, corn meal, wheat flour, rice, honey, butter, and cheese)—as long as the commodities they took did not go to waste.

According to a 1983 committee document prepared by the House Government Operations Committee, the first recipient States encountered great difficulty in distributing their allocations of cheese. Although there were ample people in needy families to make use of the commodity, there was no system in operation to handle its distribution. State and local governments continued to find that they could not handle the new program on their own and called on nonprofit and charitable organizations for assistance. Still, there continued the problems of transporting and storing the commodities.(*151*)

Enactment of the Jobs bill (Public Law 98–8) provided for the creation of the Temporary Emergency Food Assistance Program. This program extended the distribution of surplus commodities to emergency feeding sites and appropriated $50 million in assistance to States for defraying the cost of commodity distribution.

A March 1984 report on the operation of the Surplus Commodity Distribution Program issued by the General Accounting Office (GAO) noted that the Secretary of USDA has to balance three objectives in managing the program: (1) to reduce surplus inventories; (2) to feed the needy; and (3) to minimize disruption of commercial sales. This study found many inconsistencies in program operation. For example, the study noted that there was no uniformity in eligibility criteria for participation in the program and distribution frequencies and quantities of commodities made available to participants varied. In some States and localities, distributions were made monthly, while in others, they were made as long as 6 months apart.(*157*)

The issue of minimizing the disruption of commercial sales did not become a point of focus until March 1983. At that time the monthly distribution of cheese totalled close to 60 million pounds. The Secretary of USDA announced that the monthly allocation of this commodity would be reduced to between 25 and 35 million pounds per month.

Both the House Committee on Government Operations and the House Agriculture Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition conducted hearings to review the effectiveness of the distribution program and to ascertain the rationale for the reduction in the cheese allotments.(*150, 151*) The major justifications for the reductions, as presented by witnesses, were that the processors could not handle the quantity of cheese being distributed per month and that cheese industry commercial sales were suffering. It was also indicated that in the fourth quarter of 1982, commercial displacement ranged between 10 and 15 percent; by the first quarter of 1983, the figure was over 20 percent. However, this figure for 1983 includes reductions in purchases by restaurants and food processors who are clearly not recipients of the free U.S. surplus dairy products.

In September 1983, the Temporary Emergency Food Assistance Program was extended by Congress through fiscal year 1985. Under the provisions of the law, States and local agencies will continue to receive available commodities and a total of $50 million in appropriations to cover the intrastate costs of distributing the commodities until September 30, 1985.

The following recommendations for enhancing the management of the program and assuring that needy individuals receive its benefits have been made:

More timely notice of arrival of food shipments so that adequate arrangements for transportation, storage, and public information about distributions can be made;(*65*)

A reduction in the time it takes for commodities to be delivered after they have been ordered;(*65*) and

Increased distribution of commodities and assurance that they are quickly distributed to those in need.(*168*)

PRIVATE VOLUNTARY AND CORPORATE INITIATIVES

The report of the President's Task Force on Food Assistance states that "private charitable and philanthropic organizations constitute an integral part of the Nation's food assistance safety net * * *."(*168*) Their efforts are an essential complement to the more formal and uniform Federal food programs. This is particularly important because of the role the private programs play in meeting specialized and localized needs.

In 1983, the U.S. Conference of Mayors studied the problems of hunger and food distribution in eight American cities. All of the cities reported an increase in the demand for emergency food assistance; five of the eight noted that they were unable to meet the increased demand due to the lack of food, storage space, and distribution capabilities.(*64*)

In November 1983, a representative of Interfaith Action for Economic Justice testified before the President's Task Force on Food Assistance on the capacity of the private, religious sector to provide food to the hungry. The witness stated that the average church would have to receive an annual increase of $12,500 in contributions to provide a level of service which would make up for the reductions made in Federal food assistance programs. Testimony continued with the witness noting that religious groups simply do not have the resources to meet the widespread need demonstrated.(*160*)

Food banks are the primary suppliers of food to agencies and organizations that provide emergency food services to the needy. In May 1983, the Center on Budget and Policy Priorities surveyed 16 food banks across the country which serve 181 emergency food programs in 12 States. The survey found that nearly one-fourth of the agencies had to turn people away and nearly two-thirds limited the number of times the same persons could acquire food. Over one-half of the agencies reported that their costs for operation had increased by at least 50 percent between February 1982 and February 1983 and one in every seven agencies reported the need to transfer resources from other services to pay the increased cost of operating a food program.(*2*)

In May 1983, the U.S. Department of Agriculture's Food and Nutrition Service released a report of nine case studies of emergency food assistance programs. This report focused on the seasonal and economic factors which affect the donation of food and the requests for food assistance. It was found that cash and food donations come primarily from individual churches, food-related industries, the United Way, and other fund soliciting organizations. The food

banks surveyed agreed that inadequate space, storage facilities, and equipment posed problems with their food service efforts, and that surplus commodities—when available for distribution—compounded these problems.(*162*)

A Food Marketing Institute survey of its 17,000 member stores found that 81 percent of the stores donated food to community or civic groups; 50 percent donated food on a regular basis; 35 percent donated food at least once per week; and 25 percent gave food to food banks for organized distribution to varied sites.(*159*)

There is a growing dependence on the emergency food services provided by charitable and voluntary organizations. These organizations are in unanimity, however, that the number of persons asking for food is surpassing their service capabilities. In short, the voluntary component is finding it more and more difficult to "fill the gap" resulting from funding reductions and eligibility changes in Federal food programs.

To assist in meeting the needs of those requiring emergency food assistance, the U.S. Conference of Mayors has recommended that: Income security and Federal food assistance programs be funded at sufficient levels.(*160*)

Recommendations from a U.S. Department of Agriculture study of food assistance programs suggested:(*162*)

> That food availability could be maximized, if increased private donations of food were solicited from food producers, processors, or manufacturers; and
>
> That commodity distribution would be more helpful to food pantries if paperwork was decreased, cheese was packaged in household use sizes, and if peanut butter, rice, beans, and dairy products were routinely provided.

The President's Task Force on Food Assistance has suggested encouraging private sector food assistance efforts through tax incentives for corporate and noncorporate taxpayers; encouraging the military to support cooperative programs by actively working with local private sector food assistance organizations; and making grants available to a consortium of national charities to continue emergency assistance to areas of most acute need.(*168*)

INTERNATIONAL HUNGER

Extent of Hunger

DEFINING WORLD HUNGER

The popular press often portrays international hunger as being a result of acute crises such as severe droughts and civil wars. While these natural and political crises do exacerbate existing food shortages, natural disasters and political crises are not the major causes of hunger in developing nations. Instead, the central world hunger problem is a chronic condition affecting poor populations worldwide.

The nutrition science literature defines hunger in developing countries as the condition in which a person consumes too few calories to be able to meet the body's minimum daily requirements, technically identified as undernutrition. Protein deficiency, once thought to be a major hunger indicator is now thought to be sec-

ondary to calorie deficiency because diets adequate in calories generally also meet protein requirements. Put simply, hungry people are those whose diets lack sufficient calories because they are not getting enough food. The Food and Agriculture Organization/World Health Organization (FAO/WHO) calorie standard is the most widely accepted basis for evaluating the extent of undernutrition.

MAGNITUDE OF THE HUNGER PROBLEM

According to the Food and Agriculture Organization (FAO) of the United Nations, one in four people in the developing countries is undernourished. Food and development agencies have calculated the number of hungry persons worldwide to be from 450 million to 1.3 billion. Despite this variability in numbers, there is no question that hunger is a major problem placing hundreds of millions of persons at risk of disease and death.(*194, 227, 230, 246, 250*)

POPULATIONS AT GREATEST RISK

The major reports agree on populations that are at greatest risk of hunger. The 1980 report of the President's Commission on World Hunger summarized these reports stating that 75 percent of the world's chronically undernourished live in India, Southeast Asia, and sub-Saharan Africa.(*227*)

According to the 1980 FAO report, Dimensions of Need, people in twelve nations are suffering "from undernourishment on a vast scale". With estimates of the number of their undernourished in millions the twelve nations are: India, 201; Indonesia, 33; Bangladesh, 27; Nigeria, 14; Brazil, Ethiopia and Pakistan, 12 each; the Philippines, 10; Afghanistan, 6; and Burma, Columbia, and Thailand, 5 each. The FAO has determined that, in 1984–85, 24 countries in sub-Saharan Africa experienced a food crisis due to the growing gap between their minimum food needs and the food supply that is available.(*194*)

Within each nation, women, infants, and children are those most affected by hunger. Infants and children are very vulnerable to the negative health impacts of inadequate food intake because of their critical nutrient needs for growth and development. The paramount importance of proper nutrition for women during pregnancy and lactation is also widely recognized.

According to the National Research Council, women's social roles in developing countries place them at more serious nutritional risk: "In communities where women carry heavy economic responsibilities, often as the sole or primary supporter of their children, neither pregnancy or lactation can be allowed to disrupt the pattern of work. Under such circumstances, when food availability is constrained, the physiological burden of pregnancy and lactation is immense."(*353*)

Not only are women, infants, and children among those most physiologically vulnerable to the damaging effects of hunger, they make up the majority of the hungry worldwide. The World Bank Development Report, 1982 and the report of the President's Commission on World Hunger have reported that infants and children make up more than one-half of the world's hungry.(*227, 246*) That

women are also disproportionately affected by hunger is noted by the World Food Council which states that the bulk of the undernourished tend to be families of landless laborers headed by women. Women, infants, and children living in rural areas are disproportionately affected by hunger.(*250*)

MEASURING HUNGER

The discrepancy among published estimates of the number of hungry persons worldwide partially reflects the use of different indicators of hunger. Those reports that discuss hunger as a result of inadequate food supply measure the gaps between per capita calorie needs versus per capita food supply (production, imports and aid combined). Recent World Bank studies of the extent of world hunger employ poverty indicators to measure the availability of food in households. A third category of reports on hunger measure the consequences rather than the causes of hunger. Falling into this category are the health and nutrition studies which document the prevalence of hunger related disease and death.

Food supply

The U.S. Department of Agriculture (USDA) reports annually on the food supply in developing countries receiving U.S. food aid. They estimate food aid needs by calculating expected per capita food supply. They compare this expected supply to past supply to determine status quo food deficits; they also calculate nutrition based food deficits comparing supply to food actually needed to furnish the population with adequate calories (in grain weight equivalents). Using this methodology USDA reported in 1984 that developing countries experienced a drop from the previous year in per capita food supply. This, they deduced, resulted in a drop in food availability compared to food needed—an indicator of increasing hunger in developing countries.(*189*) Their region and country specific analyses identified the African continent (excluding South Africa), as having the worst declines in per capita food production, with the Sudano-Sahelian countries most drastically affected by food shortages resulting from a severe long-lasting drought in that area.(*187*)

The International Food Policy Research Institute (IFPRI) identifies a similar gap between food available and food needed. In Closing The Cereals Gap With Trade and Food Aid, their 1984 report, IFPRI calculated that 42 million metric tons of additional food aid (compared to 1980–81 actual food aid) would be required to bring the diets of those in developing countries up to FAO/WHO minimal nutritional standards, the most widely accepted international nutrition standards.(*202*)

The FAO also employs food supply needs as a measurement of the extent of hunger. Comparing per capita food supply to minimum per capita caloric requirements, FAO has concluded that worldwide there are approximately 450 million hungry persons.(*194*)

Food supply studies of hunger and food aid needs are useful indicators of the magnitude of the gap between food supply and minimal nutritional needs. They are also useful in locating regions and

nations where that gap is the widest. However, neither USDA, IFPRI, nor FAO studies of a country's food needs adjust their per capita figures to reflect food available specifically to poor households—the group in each country most likely to be without enough food. To more accurately assess food available to those in poverty, several World Bank hunger and poverty assessment reports suggest adjusting each nation's per capita food supply figures to reflect income distribution.(*230*)

Poverty measures

During the 1970's the World Food Council was estimating the extent of hunger by calculating food supply and food aid needs. At its 1984 10th anniversary session, the Council concluded that food supply and hunger should be viewed as different problems with related, but separate, solutions. They found that while the world food supply had improved greatly since 1974, there had been no alleviation of the problem of hunger. The Council commented on this apparent paradox of hunger amidst a plentiful food supply:(*250*)

> The World is feeding nearly 1 billion more people in 1984 than in 1974, and there is ample food produced globally for all the world's people; yet there remain hundreds of millions of hungry and malnourished people.

To specifically address the problem of hunger and not just that of food supply, the Council recommended that future studies address the socioeconomic factors which limit access to available food, primarily lack of income.

Economic and statistical analyses by the 1983 World Bank paper Poverty, Undernutrition, and Hunger further confirm the World Food Council's above recommendation. The paper concludes that "the vast majority of hungry or undernourished people are receiving too few calories because they are poor.(*126*) Using absolute poverty as an indicator of the extent of hunger, in 1980 the World Bank estimated that there were 780 million persons at risk of hunger. Absolute poverty occurs when people are too poor to obtain a calorie-adequate diet; that is, the number of calories needed to lead a reasonably productive and energetic life. Although the proportion of people in absolute poverty in developing countries fell in the 1960's and 1970's, except in sub-Saharan Africa, the number of people in absolute poverty—and at risk of hunger—had increased.(*246*)

The 1983 World Bank staff paper on poverty and hunger, while identifying poverty as the best indicator of hunger, clarifies that income per capita is not sufficient to measure the extent of hunger in every developing nation. The example of Sri Lanka, where "basic needs are so much better fulfilled than real income-per-person would suggest" is cited to support the need to examine money and service resources available per person, rather than simply income per capita. Specifically, the World Bank recommends that the extent of hunger in a particular nation be determined by: (1) the availability of socially provided basic services such as health care; (2) gaps between received and disposable income—disposable for food consumption and not for such payments as interest, rents, et cetera; (3) relative prices and composi-

tion of the bundles of needed commodities; and (4) income distribution.*(213)*

Health and nutrition indicators

A final group of indicators is used to measure the damaging health and nutrition consequences of hunger in developing nations. An available food supply and income are clearly antecedent to an individual's ability to get enough food. Illness, on the other hand, is both cause and consequence of hunger; death can be the final result.

A limited number of surveys have directly assessed the health and nutrition effects of hunger in developing countries. The World Health Organization and UNICEF keep selected morbidity and mortality statistics worldwide. Country-specific nutrition surveys have been conducted by the Agency for International Development, the World Health Organization, and individual nations for the purpose of planning food distribution and health programs. The most widely accepted indicators of hunger from such data collection are: nutritional deficiency diseases, low birthweight and infant mortality, and childhood illnesses and related child deaths.

Nutritional deficiency diseases.—Undernutrition in developing nations is manifested primarily in four major nutritional deficiency diseases: protein-energy malnutrition (PEM), xerophthalimia (vitamin A deficiency), endemic goiter (iodine deficiency), and nutritional anemia (iron deficiency).

Infants and children who are chronically undernourished are most often reported to be growth stunted in height and weight, and have fewer brain cells because of insufficient caloric intake during critical brain growth periods. The children are tiny, with underdeveloped organs and impaired ability to learn.*(328)*

Protein-energy malnutrition is manifested in marasmus, where the body appears to be wasting away, and the limbs are emaciated and weak. Kwashiorkor, another manifestation of protein-energy malnutrition, results in children with swollen bellies, accumulated fluid in the limbs, skin which is tinted reddish-orange, and rashes covering the body.

Xerophthalimia is a result of diets deficient in vitamin A, and results in blindness for 500,000 children each year.*(340)* Endemic goiter is a consequence of diets low in iodine, and can lead to deafmutism, deformity, and mental retardation. It affects 200 million persons worldwide. Iron-deficiency anemia, affecting 500 million women, infants, and children in developing countries, leads to serious physical and mental health consequences (described in Hunger in the United States, Extent of Hunger section above).*(246)*

Along with infants and children, women of childbearing age represent a group which is most vulnerable to nutrition deficiency. Comprehensive data on the nutritional status of women in developing countries is severely lacking. A recent review of studies of women's nutrition found large deficiencies in caloric intake for a significant proportion of women in most developing countries. Surprisingly pregnant and lactating women consumed diets similar to other women, even though their nutritional needs are considerably greater. Not only were women found to consistently eat less than men, but, on the average, they consumed a smaller proportion of

their recommended daily intake of calories. Iron and vitamin A were commonly deficiency in their diets and anemia was highly prevalent among women in all studies.*(339)*

Low birthweight.—UNICEF, the World Health Organization (WHO), and the Pan American Health Organization (PAHO), agree that in developing countries a woman's nutritional status before pregnancy and her weight gain during pregnancy are the most important factors in her future infant's birth weight. If a mother is undernourished during pregnancy relative to her own needs plus her fetus' needs, the baby will be deprived nutritionally and have a great risk of being born with a low birthweight. Low birthweight is closely associated with infant illness and death. According to the WHO, the poor nutritional status of women in developing countries is reflected in the low birthweight rate that is 2½ times that in the United States.*(237)*

The effects of undernutrition during pregnancy cause damage long after birth. UNICEF's State of the World's Children reports that low birthweight infants in developing countries suffer a high risk of being malnourished themselves and of dying within 1 year. The deaths of low birthweight infants comprise 4 million out of approximately 12 million infants who die each year.*(237)*

While the World Health Organization estimates of the proportion of low birthweight infants range between 10 and 50 percent in each developing country,*(237)* development and survival outlook for each low birthweight infant is very bleak. It should be noted that the low birthweight infant is a neglected aspect of international child health and survival in the literature reviewed.

Infant mortality.—The Infant Mortality Rate (IMR) is the number of deaths under age 1 for every 1,000 live births. Beyond statistics, the IMR is a powerful indicator of the quality of children's lives including health and the absence of hunger. UNICEF reports that the infant mortality rate in developing countries declined from approximately 200/1,000 live births in 1950 to 100/1,000 in 1975—a drop of 50 percent in 25 years. While this improvement is significant, UNICEF's 1980 statistics reveal that the rate of infant mortality in less developed countries remains at over five times the rate in more developed countries.*(237)*

The General Assembly of the United Nations has adopted the target of reducing worldwide infant mortality rates to 50 or less per 1,000 births by the year 2000. UNICEF predicts, however, that "unless there is a sudden acceleration of progress, that target will not be achieved." More than 70 nations are expected to have infant mortality rates above the target, with three out of five of the world's babies born in those 70 nations. Adequate caloric intake during pregnancy is a key factor in preventing low birthweight and would prevent one-third of infant deaths worldwide.*(237)*

Childhood illness and mortality.—In addition to women and infants, young children are at particular risk of permanent health damages due to undernutrition. During the critical periods of growth they require higher concentrations of calories, protein, and nutrients in their diets. Consequently, hunger and related diseases have been identified as the most serious child health problem in many developing nations.*(228)*

The World Bank's policy report Malnourished People, for example, states that malnutrition and diarrheal disease frequently simultaneously afflict young poor children in developing nations. The report explains that one problem compounds the damage of the other. Diarrhea is exacerbated by undernutrition and, in turn, the extreme loss of fluids aggravates the poor health status of the already undernourished child.(*328*) UNICEF has reported in The State of the World's Children, 1984 that diarrhea and malnutrition together are the cause of three-fifths of all preventable deaths.

There is also a strong synergistic linkage between hunger and infectious disease. UNICEF found that children with even moderate malnutrition were three times more likely to contract infections. After contracting an infection undernourished children are found to be 10 times more likely to die from infectious diseases than their well nourished counterparts. With measles infections the relative mortality risk is even greater. The Agency for International Development reports that a child in Guatemala is 268 times more likely to die as a result of inadequate nutrition and no immunization against the disease than a child in a developed nation.(*246*)

World Bank and UNICEF hunger and health studies consistently report that hunger and inter-related episodes of diarrhea and infection are the primary causes of children dying each day in the developing nations. While child survival rates internationally have improved, UNICEF documents that in 44 developing countries children are dying at 20 to 40 times the rate of those in rapidly developing nations such as Costa Rica and Trinidad. UNICEF estimates that 40,000 children under age 5 die each day, with malnutrition estimated to contribute to two-thirds of these deaths.(*237*)

Effectiveness of International Programs and Policies

Introduction

World hunger is a problem of immense proportions and subtle complexities. Devising solutions, therefore, depends upon working with those causes which can be affected by efficient and cost-effective change.

Whether a person is hungry is affected by the amount and kinds of food available in the country, in the region, in the market and in the household; whether the individual's household is able to obtain the food that is available; the use of the obtained food by members within the household; and the health status of the individual.

Malnutrition can result from inadequacies in any one or more of these factors. Changes in one factor may be ineffective unless others are changed simultaneously. Efforts to expand the availability of food will have no nutritional effect if the additional food is not made accessible to malnourished people. Although the Green Revolution of the 1960's increased agricultural production in poor countries it did not reduce malnutrition as widely as had been hoped.

In the Philippines, for example, rice production almost doubled in the 1970's as a result of agricultural mechanization. From 1975 to 1981 the value of the GDP (gross domestic product) per worker rose approximately 20 percent. (Data from the Bureau of Agricul-

tural Economics, Ministry of Agriculture and Food, Government of Philippines reported in The Philippines: Recent Trends in Poverty, Employment and Wages, World Bank, January 11, 1985 unpublished report.) This increased productivity was not reflected in the incomes or food available to the farmers who worked the land. In fact, by 1978, the nation's per capita calorie consumption had fallen to the lowest in all Asia (except in war torn Cambodia).(*290*) According to data from the Government of Philippines, reported by the World Bank, daily wages in agriculture, in real terms, fell sharply. For those workers producing rice, the real wages fell 14 percent from 1970–72 to 1980–82. (World Bank report cited above.)

Efforts to improve the ability of the poor to purchase food may also be unsuccessful if they result in the purchase of nonfood commodities, with no resulting improvement in food consumption among the malnourished members of the household. Before any program to reduce hunger is implemented, the interrelationship of the economic and cultural factors leading to hunger must be carefully considered.

When resources are scarce, programs are often limited to the most vulnerable groups, that is, children less than 3 years old and pregnant and lactating women. But the costs, the intra-household distribution of food, and other difficulties of age-specific programs may make them an inefficient way to address hunger. Alan Berg of the World Bank states: "In planning a program, it is preferable to start, not with a decision to assist a given group, but with the total malnourished population as a target."(*328*)

Several observations on the effectiveness of anti-hunger efforts can be summarized before examining specific programs and policies. First, programs designed to alleviate hunger must be periodically evaluated to ensure that they are meeting their goals. For example, if a food aid program is causing disincentives to local agricultural production, it may not meet its goal of improving the adequacy of the food supply or access of lower-income people to food. Nutritional intake of individual household members must also be evaluated.

Second, interrelationships of social, political, and economic factors determine the success or failure of strategies in particular situations. Recently, for instance, we have seen how civil unrest can impede the ability of programs to reach people.

Third, assisting people in meeting their basic needs, especially food, health, sanitation, and education, will empower them to move beyond subsistence with its accompanying hunger, disease, and inability to achieve full human potential.

HUNGER INTERVENTION PROGRAMS

Supplement programs

Supplemental feeding programs, the largest and often the most popular activities undertaken to alleviate hunger, provide food to nutritionally needy people. In developing nations they are usually designed for pregnant and lactating women and children under age 3.

Two recent reviews summarized data from more than 200 supplementary feeding projects.(*320, 327*) The results from these reviews

indicate that nutritional improvement is possible with food supplement programs. Many feeding programs result in significant improvements in growth for infant and child participants, decreases in illness, and improvements in cognitive development. Evaluations of prenatal supplemental feeding programs in Guatemala, India, Colombia, Canada, and the United States found supplementation was associated with increased birthweight, a decreased incidence of low birthweight infants, and/or decreased neonatal mortality.*(341)*

However, evaluation of the effectiveness of these programs does not always show a positive impact on health or nutritional status. The mixed findings from evaluations of these programs is due, in part, to variables in the programs such as adequacy of food quantity distributed, the duration of participation in the program, the timing of supplementation, the nutritional status of persons entering the program, and the degree of targetting of the food programs to those most in need.*(341)*

Programs which are well-designed to reach the neediest populations have documented nutritional improvements. A program in Colombia, by reaching a more chronically malnourished group than children in the community at large, resulted in growth improvements in 45 percent of the children.*(342)* A supplemental feeding program in Mexico City which was reaching only mildly malnourished children, on the other hand, reported no significant impact on the prevalence of malnutrition.*(341)*

School-based supplemental feeding programs are relatively expensive, but have strong political appeal. The support they receive is not readily transferable to other types of nutrition or education interventions. However, if options exist, other strategies should be considered.*(328)*

Food for Work Programs, in which wages are paid totally or in part in food rather than in cash, are a form of food supplement. They were originally developed to provide income generating employment opportunities and improve rural infrastructure. Because of the nature of the work, only the poorest households tend to participate.*(342)*

Data on the nutritional effectiveness of Food for Work Programs is limited. A land-army project in Mysore, India, in which participants were living away from their families increased adult male weight by 8–15 kilograms.*(374)* There is almost no documentation of the effect of food for work projects on individuals within the family. A study currently being conducted in Bangladesh may contribute information about the nutritional impact of Food for Work Programs on families.*(371)*

Food Stamp Programs

Food Stamp Programs are designed to increase the food purchasing power of a household, thus leading to improved food consumption. There are few studies of Food Stamp Programs in developing nations. A preliminary evaluation of the food stamp scheme implemented in 1979 in Sri Lanka indicates positive nutritional effects. In 1981–82 the program increased caloric intake of the poorest fifth of households participating by 11 percent. This occurred although the nominal value of stamps remained constant from the program's inception. It is possible that, if food stamps had been indexed to

correlate with inflation, the nutritional benefit may have been greater.*(331)*

To the extent that food stamps increase the purchasing power of a household, an impact on nutritional status can be assumed. However, food stamps vary in their impact on nutrition depending on the effect of prices and income changes on food buying patterns. As noted in the evaluation of the Sri Lanka program, these programs are most cost-efficient if targetted to the poorest households.

Food subsidies

Governments in many developing countries control food prices, subsidizing either the producer or consumer, or both. Low food prices obviously improve the economic access of poor people to food. However, when food producers cannot obtain an adequate income as a result of artifically low food prices, their nutritional status and the food supply suffers.

If food subsidies are not targetted, program costs are prohibitive. Many countries, therefore, limit subsidies to vulnerable groups, to those foods normally consumed by the low-income population, and/or to specific low-income geographic areas.

Studies in India, Sri Lanka, Bangladesh, Pakistan, and Mexico show improvements in food consumption as a result of food subsidies.*(328)* However, other studies indicate that subsidies have not resulted in a decrease in the prevalence of preschool malnutrition.*(342)*

Food fortification and formulated foods

Alteration of the food supply to make it more nutritious has the potential of reducing specific nutrition deficiency diseases, such as goiter or anemia, in a population. Fortification of sugar with vitamin A and salt with iodine have proven effective in alleviating some forms of malnutrition.*(326)*

Formulated foods were developed to meet the special needs of infants following weaning. Because malnutrition at this stage of a child's development is a serious problem in developing countries, many weaning foods, usually based on a locally available staple food, have been developed and promoted. A number of studies indicate that they can be effective in protecting weanlings from malnutrition, and in stimulating growth.*(326)* Where commercially prepared foods are too expensive for the target population, nutrition education is necessary to promote the development of home-prepared formulated foods.

Primary health care

The United Nation's Children Fund (UNICEF) has demonstrated the effectiveness of selected primary health care techniques in reducing infant mortality and improving growth among malnourished children.*(237)* Interventions such as vaccinations, oral rehydration for victims of diarrhea, midwifery, maternal education on breastfeeding and weaning, and administration of antibiotics against respiratory disease have been shown to decrease infant and child death rates in Haiti, India, and Thailand.*(329)*

A Worldwatch report notes that such projects have reduced infant mortality by one-half in demonstration projects, for a cost of

as little as $2 per person. The report further estimates that extending primary health care to all the world's people would cost an additional $10 billion annually—saving 5 to 10 million lives annually.*(329)* This statistic demonstrates not only that lives of children are saved, but also that millions more have fewer illnesses, better growth, and a greater chance to be economically productive.

Primary health care interventions including Oral Rehydration Therapy (ORT) not only reduce the risk of death from malnutrition and dehydration, they also reduce the short-term negative nutritional impact of the illness. World Health Organization data from the Philippines, Bangladesh, and Turkey show that children treated with ORT showed better weight gain than children to whom ORT was not available. (See Chart No. 1, p. 37.) According to UNICEF, with low-cost primary health care interventions, "the downward spiral of malnutrition and infection can be broken and in its place, an upward spiral can be set in motion—less frequent illness, leading to more complete recovery, leading to more normal growth, leading to less frequent illness * * *". The quantitative impact of comprehensive primary health care interventions on children's nutritional status, as measured by the growth curve, is illustrated by UNICEF in Chart No. 2, see p. 38.*(239)*

A secondary achievement of primary health care projects is a reduction in birth rates in densely populated nations. In India, for example, where health care reduced infant and child mortality, the use of contraceptives increased. Family planning was stimulated even in those areas where sterilization campaigns had previously caused intense resentment.*(333)*

The simple and low-cost technique of administering oral salts to children with diarrhea can save millions of children from dying of malnutrition and dehydration. As noted in the section above on Extent of Hunger Internationally, diarrheal disease lowers a child's nutritional level and every episode puts him/her at risk of death from dehydration. In Bangladesh, Costa Rica, Egypt, Haiti, Jamaica, Kenya, Nepal, Papua New Guinea, the Philippines, Sri Lanka, Thailand, and Tonga, oral rehydration salts reduced hospital admissions by more than 50 percent and decreased mortality rates by over 40 percent among those who did have to be hospitalized for diarrheal disease. (See Chart No. 3, p. 39).

The need for maternal education on breast-feeding has been documented by several reviews of the patterns and trends of breast-feeding in developing countries. Compiling national survey data the reviews find that a very large proportion of infants are never breast-fed or breast-fed for less than 3 months in Central and South America, and the Caribbean. In scattered large urban areas in Asia, Africa, and the Near East, similar breast-feeding patterns exist. Elsewhere the extent and duration of breast-feeding is very long, but there are indications that the duration of breast-feeding is declining as formula or infant weaning foods are introduced early in infancy.*(347, 350)*

Integrated health and nutrition interventions

An integrated intervention combines basic health services, such as immunizations and oral rehydration therapy, with nutrition and family planning services. Packaging of the services is more effec-

tive and more efficient than individual programs which are not coordinated.*(342)*

Studies clearly indicate the cost-effectiveness of these programs in meeting a number of health and nutrition objectives. In Narangwal, India, the integrated approach was able to decrease mortality and morbidity and improve growth. However, the relative importance of health care versus nutrition supplementation varied for different health outcomes. Prenatal supplementation for underweight women, either alone or in combination with medical care, was the most cost-effective means of reducing prenatal and neonatal mortality. Medical care was the most effective means in reducing infant mortality; and nutrition or health care were equally effective in decreasing mortality in 1- to 3-year-old children. Children receiving nutrition care in combination with medical care services exhibited the highest mean weights.*(343)*

Similar results were reported from an evaluation of a World Bank project in Tamil Nadu, India. Supplementary feeding of high risk children in combination with health care significantly reduced the number of moderately and severely malnourished preschoolers.*(341)* Catholic Relief Service data indicate that clinics supplying food supplements are the ones most regularly attended.*(341)* A chart showing the costs and impacts of various health and nutrition programs follows.*(329)* (See Chart No. 4, p. 40.)

Nutrition education

Nutrition education promotes the better use of available food resources for meeting nutritional needs. It is especially important for the pregnant woman and mothers of small children so that the special nutritional needs of the fetus and infant are met. Unfortunately, little evidence has been gathered on the effectiveness of nutrition education in improving food practices and nutritional health. The relative merits of different methods of nutrition education in improving nutrition remain largely unknown. Mass media, such as radio announcements, combined with personal counseling, appear to have the greatest effect on changing nutrition behaviors.*(326)*

AGRICULTURE, DEVELOPMENT AND FOOD SUPPLY

Agriculture and rural development projects and policies that cause food prices to decrease and to fluctuate less over time offer a high potential for improving the diets of the urban poor. High price levels and severe price fluctuations are much more harmful to the poor than to the better-off urban consumers.*(205)* On the other hand, projects which cause food price levels and/or net farm incomes to increase will benefit low-income food producers.

The type of crop production resulting from specific agricultural policies may influence levels of hunger. Much malnutrition is present in households which consume most of what they produce. For those households, changes in the kinds and amount of food produced, and fluctuations during the year in relation to the harvest, have significant impacts on levels of malnutrition. Agriculture and rural development projects can change both the kind f crops planted and patterns of cropping to improve food availability year round.

In planning agriculture development projects it is necessary to take seasonal variability into account, both in assessing food aid needs and in project implementation. Most poor rural people live in geographic areas of marked variability in wet and dry seasonality. During the wet season, especially before the first harvest, food supply is limited, food prices are high, malnutrition, morbidity and mortality all rise, birth weights drop, and neonatal mortality rises. Further, many remote and poor areas are inaccessible by vehicle during the rains.(*183*)

Appropriate technologies have not been designed for poor farmers in developing nations according to the Office of Technology Assessment (OTA). Agricultural development projects based on large scale models from the United States are not successful. Recommended technologies are low risk, resource conserving, small scale, locally produced, easily repaired, and based on traditional methods.(*380*)

The influence of rural development projects on the control of the intrahousehold budget, the allocation of the time of women, and the nutritional effect of changes in breast-feeding and child care practices need to be assessed. Research to evaluate these influences has been limited.(*341*) However, studies by AID, the World Bank, and FAO are currently in progress.

Cash cropping

Agricultural projects can have a negative effect, particularly when cash cropping, that is, producing food for sale, is encouraged among farm households. These households, because they become dependent on income to purchase food, are at risk of fluctuations in food supply and real net income. This financial risk is a result of many factors: the costs of production; the increased vulnerability of their land to pests due to the use of uniformly genetic stock; and farming which is more susceptible to outside market pressures resulting from the international trade environment.(*290*)

In Haiti, where agriculture development has encouraged many farmers to substitute coffee for other foods grown, the farmers produce at a much greater financial risk. They have become more dependent on fertilizer to produce the amount and type of cash crop desired and have become more dependent on middlemen who control the coffee marketing and the price farmers receive for their crops.(*290*) Lower incomes result in less food availability and increased hunger.

Cash cropping projects do not always have negative nutritional impacts. The additional income provided can result in a net gain in the ability of the household to sustain itself, with food and other necessary items. Because the nutritional impact of policies which promote the development of crops for income vary widely, careful study of the effect on subsistence households is necessary.(*328*)

Micro-enterprise credit

Micro-enterprise credit is the extension of credit in very small amounts to the landless and nearly landless poor, both men and women, in small, interdependent groups, administered by well-trained workers, for the purpose of income generating activities. These activities are based on time-tested survival skills with which

the poor are already familiar. The enterprises include such activities as sewing of clothing, rice-husking, pressing mustard seeds for oil, making fishing nets, mats or pottery, trading commodities, and selling cow's milk.

Current evaluations of these direct projects show these to be among those having the greatest positive impact on the landless and nearly landless. The International Fund for Agricultural Development (IFAD) 1982 annual report in its evaluation of rural credit projects found: "the provision of credit is one of the most powerful means of reaching the poor directly and preferentially and * * * enables them to achieve significant increases in living standards."(*379*)

The Program for Investment in the Small Capitol Enterprise Sector (PISCES), funded by AID, found that the lack of even minimal amounts of capital is the problem most frequently cited by micro-entrepreneurs(*376*) who represent 30 to 60 percent of the labor force of Third World countries.(*369*)

The perception of private financial institutions has traditionally been that lending small amounts to the very poor entails too great a risk with transaction costs too high. Several recent credit projects have disproven this assumption. Payback rates of 99 percent are routinely reported, and the cost of delivering credit assistance has been low.(*379*) The largest of these projects is the Grameen Bank Project (GBP) in Bangladesh. Preliminary data reveals that the projects are working positively toward the goal of economic self-sufficiency for poor and landless people.

Food supply

Factors which affect whether a country or region has sufficient food to provide for its population can be divided into two broad categories. Emergency lack of food results from a sudden occurrence, such as flood, drought, or civil unrest. A structural lack of sufficient food results when a country cannot produce enough food locally and when it does not have sufficient foreign exchange to purchase the food on the international market. Generally, emergency conditions are short-term, lasting only one growing season. Structural problems take longer to resolve. In some cases, a country can suffer from a food shortage because of both emergency and structural causes, as in the current crisis in Africa. Appropriate responses depend upon the particular circumstances involved.

Insufficient food because of an emergency.—Because emergency situations vary so greatly from country to country, there is little consensus on recommendations for the international community to increase the effectiveness of emergency relief efforts. In some circumstances, the U.N. Disaster Relief Organization is the appropriate agency for coordinating emergency efforts; in others the International Committee of the Red Cross, the World Food Program, or the United Nations Development Program may be more appropriate. There is common agreement that better coordination among UN agencies, donor government relief agencies, church groups, the Red Cross, and private relief agencies would facilitate relief efforts.

Chronic insufficiency of the food supply.—Chronic food shortages result when a nation cannot regularly produce enough food for its citizens and cannot purchase it in international markets. Nations

falling in this category are dependent upon external food aid. The United States is one of the largest providers of food aid, most of which is channeled through the Public Law 480 program.

Food aid has been the subject of continuing controversy. Certain critics charge that its negative impact on local agricultural production should limit food aid to emergency programs. Some believe that food aid encourages the neglect of agriculture with resulting negative impacts on the majority of the rural population. The most extreme view holds that food aid may "actually increase hunger and repression by reinforcing the power of national and international elites who usurp the resources rightfully belonging to the hungry."(*219*)

Proponents of food aid argue that it can, by increasing food supplies in low-income countries, establish a beginning for development of the rural infrastructure. Two arguments support this view. One is that food aid adds to international transfers, increasing the assets of the recipient country. The second is that food aid can increase the speed of economic growth, facilitating improvements in all sectors of the economy. This view recognizes that economic growth is not necessarily spread across the economic spectrum, and that care must be taken that food aid does benefit the poorest people. Because food aid can lead to lower food prices, poor people thus have increased access to food, which can result in improved nutritional status and improved productivity.(*205*)

A concern is that fluctuation in the level of food aid can cause low agricultural production in years of high food aid flows, and severe economic and nutritional problems in years of low food aid flows. Evidence exists, however, that food aid, when properly used, can help local agriculture, and provide incentives to increased production in rural development programs.(*205*)

POPULATION GROWTH AND OTHER DEVELOPMENT ISSUES

Population growth creates pressures on food availability. Programs and policies that limit population growth through decreasing family size also have an impact on levels of nutrition.

While the populations of some countries change little in size from year to year, other nations are experiencing the fastest growth ever recorded. For example, the populations of West Germany and Hungary are slowly declining in size, while those of Kenya and Syria will double in two decades.(*246*) Many countries with continued population growth are now moving into a period where a failure to sharply reduce family size is already leading to a decline in per capita consumption of food.(*180*)

Disparities among nations cause stress within the international economic system. Low fertility countries are food aid donors; high fertility countries are recipients.(*180*)

Among a number of methods of fertility control discussed in the literature is breast feeding. Women who are breast feeding do not usually ovulate, a precaution taken by nature to avoid the physiological stress associated with lactating and being pregnant at the same time.(*180*)

A broad range of other developmental efforts can affect the extent of hunger. To cite some examples:

Water and sanitation programs can serve to dramatically intercede in the malnutrition-infectious disease cycle. Much disease is linked to inadequate water supply or unsafe sanitation. It is clear that the provision of a safe water supply can decrease the vulnerability of the malnourished to disease.

Reforestation, by reclaiming land that has been lost to food production, or by expanding the potential arable land, has the potential for increasing food availability in poor nations. Land tenure programs designed to make agriculturally productive land available to poor or subsistence farmers have the potential to increase food production among nutritionally vulnerable groups in the population. Marketing, storage, warehousing, and management programs must be coupled with increased production schemes in many countries to assist in assuring food security.

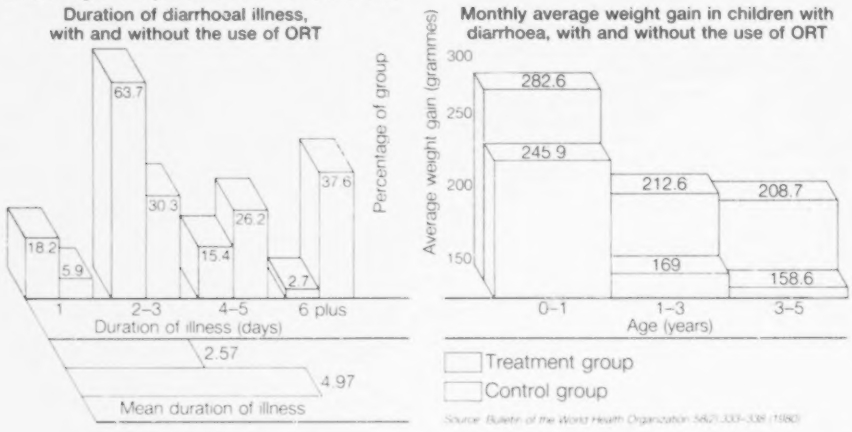
Education can be a significant indicator of hunger. Over 24 separate studies in 15 nations have established that the level of the mother's education is a key determinant of her children's health. In 11 countries studies by the Latin American Demographic Centre, the influence of the mother's education on the child's health was found to be stronger even than the level of household income. Empowering people, and especially women, by education is therefore a key intervention in improving the lives and well-being of the world's children.*(237)*

Many private voluntary organizations are implementing educational programs on home gardening, food storage and preservation, and food transport because these are important elements in ensuring that the aggregate food supply is made available with minimal losses to low-income and food-deficit areas.

CHART NO. 1

Effect of ORT on weight-gain and on duration of diarrhoeal illness

In a study of ORT administered at home by trained midwives in a rural area of Turkey, a total of 1,237 children aged 0–5 years were monitored over a 16 month period. 746 were in the ORT treatment group and the rest in a control group. The results:–

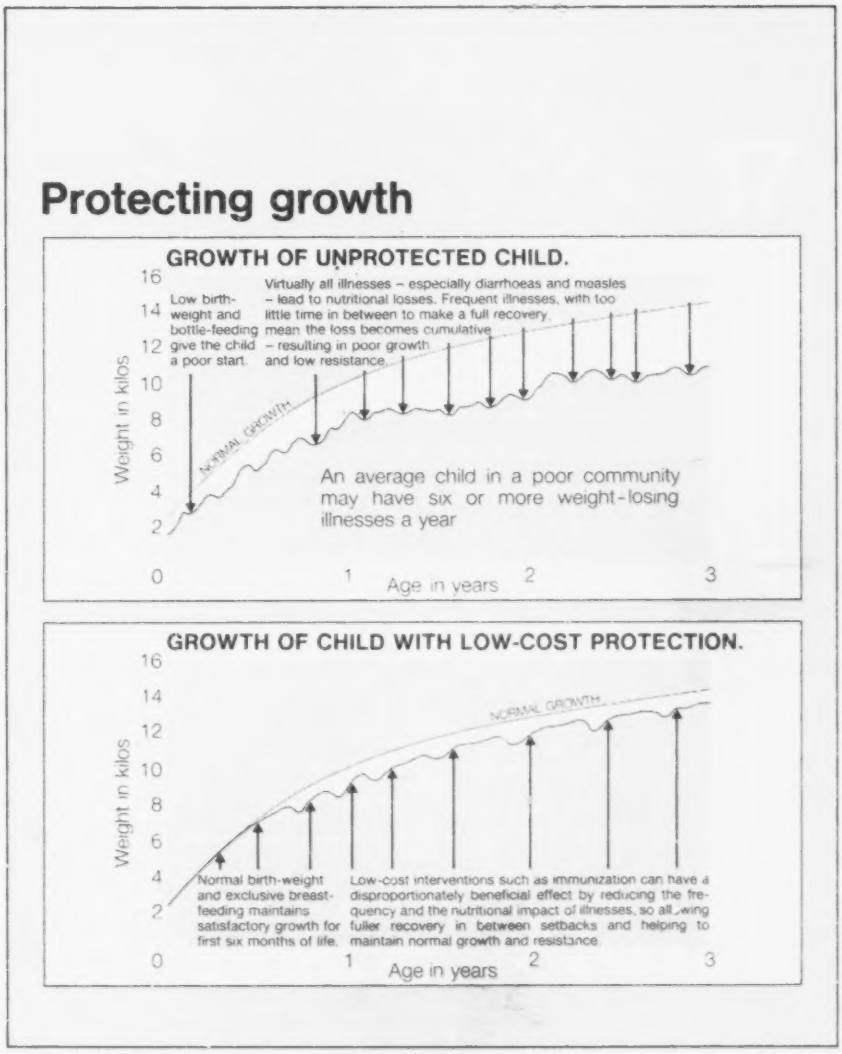


Source: Bulletin of the World Health Organization 58(2):303–308 (1980)

49

Reprinted from: The State of The World's Children, 1985, United Nation's Children's Fund (1985).

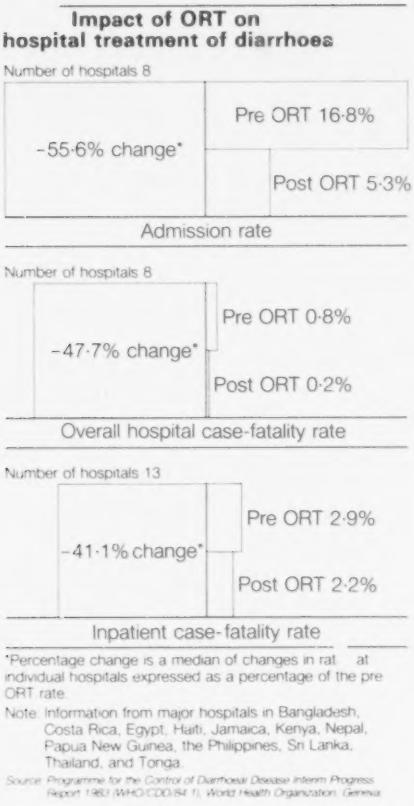
CHART NO. 2


Protecting growth
GROWTH OF UNPROTECTED CHILD.
Low birth-weight and bottle-feeding give the child a poor start.
Virtually all illnesses – especially diarrhoeas and measles – lead to nutritional losses. Frequent illnesses, with too little time in between to make a full recovery, mean the loss becomes cumulative – resulting in poor growth and low resistance.
NORMAL GROWTH
An average child in a poor community may have six or more weight-losing illnesses a year
Weight in kilos
Age in years
GROWTH OF CHILD WITH LOW-COST PROTECTION.
NORMAL GROWTH
Normal birth-weight and exclusive breast-feeding maintains satisfactory growth for first six months of life.
Low-cost interventions such as immunization can have a disproportionately beneficial effect by reducing the frequency and the nutritional impact of illnesses, so allowing fuller recovery in between setbacks and helping to maintain normal growth and resistance.
Weight in kilos
Age in years

44

Reprinted from: The State of The World's Children, 1985, United Nation's Children's Fund (1985).

C H A R T N O. 3


Impact of ORT on hospital treatment of diarrhoea
Number of hospitals 8
-55·6% change*
Pre ORT 16·8%
Post ORT 5·3%
Admission rate
Number of hospitals 8
-47·7% change*
Pre ORT 0·8%
Post ORT 0·2%
Overall hospital case-fatality rate
Number of hospitals 13
-41·1% change*
Pre ORT 2·9%
Post ORT 2·2%
Inpatient case-fatality rate
*Percentage change is a median of changes in rat at individual hospitals expressed as a percentage of the pre ORT rate.
Note: Information from major hospitals in Bangladesh, Costa Rica, Egypt, Haiti, Jamaica, Kenya, Nepal, Papua New Guinea, the Philippines, Sri Lanka, Thailand, and Tonga.
Source: Programme for the Control of Diarrhoeal Disease Interim Progress Report 1983 (WHO/CDD/84.1), World Health Organization, Geneva.

Reprinted from: The State of The World's Children, 1985, United Nation's Children's Fund (1985).

CHART NO. 4

Table 3: Primary Health Care Projects: Success Rates and Cost

Project	Infant Mortality Rate		Annual Cost Per Capita
	Project Area	Control Area	
	(percent)		(1983 dollars)
Guatemala, rural (1970-72)	5.5	8.5	$8.90
Haiti, rural (1968-72)	3.4	15.0	$3.85
India, Jamkhed (1971-76)	3.9	9.0	$1.55
India, Narangwal (1970-73)			
Medical care	7.0	12.8	$2.40
Nutrition Intervention	9.7	12.8	$4.80
Combined	8.1	12.8	$3.80
Nigeria, Imesi (1966-67)	4.8	9.1	$3.60

Sources: Davidson R. Gwatkin et al., *Can Health and Nutrition Interventions Make A Difference?* (Washington, D.C.: Overseas Development Council, 1980); Warren L. Berggren et al., "Reduction of Mortality in Rural Haiti Through A Primary-Health-Care Program," *The New England Journal of Medicine*, May 28, 1981; Rashid Faruqee and Ethna Johnson, "Health, Nutrition, and Family Planning in India," World Bank, February, 1982.

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PART II: ANNOTATED BIBLIOGRAPHY

I. DOMESTIC

A. Extent of Hunger

(*1*) Anti-Hunger Coalition of Texas, Austin, TX, Summer 1982.

Hunger in Texas—A State of Need

This report provides both an historical view and current insight into the operation of both Federal food assistance programs and privately run efforts and their impact on alleviating hunger in the State of Texas. In addition, the report includes interviews with 24 low-income families across the State who discuss their experiences and problems in "getting a reasonable diet."

(*2*) Bishop, Kathryn P., Center on Budget and Policy Priorities Washington, DC, May 1983.

Soup Lines and Food Baskets

Survey of private nonprofit emergency food programs to determine the extent of increase in their use, characteristics of participants, and methods the agencies use to cope with increased demand.

(*3*) Blackwell, Angela Glover; Salisbury, Lois; and Arriola, Anita P., Public Advocates, Inc., San Francisco, CA, June 29, 1983.

An Administrative Petition to the United States Department of Health and Human Services: Administrative Petition to Reduce the Incidence of Low Birth Weight and Resultant Infant Mortality

This petition, filed on behalf of 13 petitioners, provides detailed information on infant mortality and low birthweight rates in this country. In addition, it provides an analysis of various remedies for reducing the high rates suffered here in the United States.

(*4*) Bread for the World, Washington, DC, September 1983.

Hunger Watch U.S.A.

This report is a compilation of surveys carried out by Bread for the World affiliates nationwide evaluating the local impact of food program cuts on poor and other nutritionally at risk people.

(*5*) Bureau of the Census, U.S. Department of Commerce, August 1984.

Estimates of Poverty Including the Value of Noncash Benefits: 1983 Technical Paper 52

This report reviews methodologies for assessing poverty statistics when noncash benefits are included as income. The effect of benefits on income is calculated for 1983. The poverty population is ana-

lyzed by various demographic and socioeconomic subgroups of the population.

(*6*) Bureau of the Census, U.S. Department of Commerce, August 1984.

Money Income and Poverty Status of Families and Persons in the United States: 1983

This document reports 1983 money income before payment of taxes, social security, and other required deductions. Detailed tables are presented by household type, sex, race, level of education, residence, occupation, and other factors for group comparisons.

(*7*) Centers for Disease Control U.S. Department of Health and Human Services, December 1983.

Nutrition Surveillance, 1981

This annual summary tabulates and discusses findings of the 1981 pediatric Nutrition Surveillance System. Health data was collected from 381,000 children (ages 0–9) in 28 States and the District of Columbia, from selected low-income pediatric populations served at health clinics.

(*8*) Centers for Disease Control, U.S. Department of Health and Human Services, Atlanta, GA, August 1984.

Centers for Disease Control: Nutrition Surveillance 1982

Summary of medical/nutritional data on low-income children and pregnant women receiving health screening in 28 States and the District of Columbia through the Special Supplemental Food Program for Women, Infants and Children (WIC), the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Program and Head Start.

(*9*) Chicago Hunger Watch, Chicago, IL, October 1983.

Chicago Hunger Watch Report 1983

This report describes in detail the hunger problems in Chicago. It discusses the status of Federal assistance programs for Chicagoans and the role played by various charitable and other nonprofit organizations in supplementing the food supply for program participants.

(*10*) Child Health Outcomes Project Maternal and Child Health Department, University of North Carolina, September 1984.

Monitoring The Health of America's Children: Ten Key Indicators

This report provides summary information on 10 major indicators of childhood disease and death. Each summary includes risk factors, prevalence data, related negative health effects, data sources, and needs.

(*11*) Children's Defense Fund, Washington, DC, 1984.

American Children in Poverty

This report reviews health and poverty statistics of children in the United States since 1979. It also discusses the percent of eligible persons served by Federal child health and welfare programs, and evaluates the costs and benefits of these programs.

(12) Citizens' Commission on Hunger in New England, Boston, MA, 1984.

American Hunger Crisis: Poverty and Health in New England

The Citizens' Commission on Hunger in New England—comprised of 25 physicians, university leaders and representatives of the religious community, labor and social service organizations—held a series of public hearings throughout New England to document the existence of hunger and its health effects. The report analyzes why hunger is a problem today and makes recommendations to remedy hunger and prevent its recurrence.

(13) City of Chicago, Mayor's Task Force on Hunger, October 1984.

Report of the Mayor's Task Force on Hunger

A report on hunger in Chicago including statistics on increases in requests for emergency food from 1981 to 1983, infant mortality rates among blacks, and poverty among women, children, and the elderly. Also reviewed is data from Chicago on continued high unemployment, observations of the health consequences of hunger as reported by medical experts in Chicago, and the reductions in benefits resulting from decreased Federal funding in jobs, public assistance, and nutrition programs.

(14) Coalition on Women and the Budget, National Women's Law Center, Washington, DC, March 1984.

Inequality of Sacrifice: The Impact of the Reagan Budget on Women

This report analyzes the impact of the Reagan administration's proposed budget for fiscal year 1985 on women including the Federal food and nutrition programs.

(15) Domestic Marketing, Consumer Relations, and Nutrition Subcommittee, Committee on Agriculture, U.S. House of Representatives, March 30, 1984.

Review of Hunger in the U.S. and Related Issues (Miami, Florida)

The subcommittee heard testimony from a diverse group of witnesses from Miami, Dade County, and the State of Florida on: (1) the extent of hunger, (2) the effectiveness of Federal and private food assistance programs in meeting the need, and (3) barriers to participation in the programs.

(16) Domestic Marketing, Consumer Relations, and Nutrition Subcommittee, Committee on Agriculture, U.S. House of Representatives, March 2, 1984.

Hearings: Review of Hunger in the U.S. and Related Issues (Chicago, Illinois)

The subcommittee heard testimony from a diverse group of witnesses from the city of Chicago and the State of Illinois, local and State officials, U.S. Representatives and administrators of Federal food and nutrition programs, representatives from various voluntary organizations involved in providing emergency food assistance, and medical experts.

(17) Domestic Marketing, Consumer Relations, and Nutrition Subcommittee, Committee on Agriculture, U.S. House of Representa-

tives, February 28, 1983, (Cleveland, Ohio); March 25, 1983, (Birmingham, Alabama); April 30, 1983, (Los Angeles, California).

Problems of Hunger and Malnutrition

This document compiles a series of three field hearings on the extent of hunger and malnutrition in America. Testimony is heard from State and local administrators of Federal food and nutrition programs, emergency feeding sites, and local officials and citizens.

(18) Duncan, Burris, American Journal of Public Health, September 1979.

A Comparison of Growth: Spanish-Surnamed with Non-Spanish-Surnamed Children

Weight, height, and head circumference measurements of 4,167 Spanish-surnamed school-aged children were compared with similar data from 2,322 non-Spanish surnamed children residing in the same Denver, Colorado neighborhoods. These data were also compared with data from six other studies.

(19) Food Research and Action Center, Washington, DC, November 1983.

Still Hungry: A Survey of People In Need of Emergency Food

Participants at 27 food pantries in 14 States were interviewed to determine: whether they were also receiving food stamp benefits; if so, why they were seeking additional food assistance; and if not, why not.

(20) Food Research and Action Center, Washington, DC, November 1984.

Bitter Harvest

A report on the need for emergency food assistance based on the responses from nearly 300 emergency food providers. The report measures the increase between 1983 and 1984 in emergency food provided, the ability of the private sector to meet the emergency need in their communities, and the number of families with children among total emergency food recipients.

(21) Food Research and Action Center/National Anti-Hunger Coalition, Washington, DC, Spring 1984.

Hunger in the Eighties: A Primer

This publication provides a chronology of hunger problems in the United States, the creation of the Federal food assistance network; circumstances leading to the recent reemergence of hunger problems, and a strategy for combatting this situation. It also discusses major studies and reports on growing hunger in the United States.

(22) Habicht, Jean-Pierre, et al., The Lancet, Vol. 1: 611-614, 1974.

Height and Weight Standards for Preschool Children—How Relevant are Ethnic Differences in Growth Potential?

This study analyzed height and weight data on children from birth to 7 years from 13 major studies in developed and developing countries. Comparisons are made between height and weight findings to determine the applicability of height and weight standards from samples of well-nourished white children in developed coun-

tries to children from diverse ethnic and socioeconomic groups in both developed and developing countries.

(23) Health and Welfare Council of Nassau County, July 1984.

Hunger in Nassau County

A report of (1) 200 interviews with participants at soup kitchens, food pantries, the Department of Social Services, and other community sites in Nassau County as to the adequacy of their food intake and difficulties they have obtaining sufficient food for their household, and (2) testimony provided by health and human service providers as to the increases in emergency food requests and recommendations to alleviate the problem.

(24) Housing and Community Development Subcommittee, Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, Washington, DC, January 25, 1984.

Homelessness in America—II

This hearing examines the plight of the homeless in America. Testimony is heard from homeless people, from those who work with them, and from those who operate shelter programs.

(25) Human Nutrition Information Service, U.S. Dept. of Agriculture, September 1982.

Food and Nutrient Intakes of Individuals in One Day, Low-Income Households, November 1979—March 1980

Food and nutrient intakes for approximately 9,100 individuals surveyed in low-income households eligible for the Food Stamp Program are tabulated in this preliminary report.

(26) Hunger Watch, New York State Department of Health, Albany, NY, February 1984.

Hunger, Undernutrition and Malnutrition in New York State, Part I: Profile of "At-Risk" Populations and Service Agencies

This is the first in a series of reports on hunger in New York State based on interviews and case reports from senior citizen centers, emergency feeding programs, government offices, health centers, and community sites. Low-income persons are surveyed to determine the adequacy of nutrient intake, need for emergency food assistance, and barriers to participation in the Federal food programs.

(27) Johnson, Kay, Rosenbaum, Sara, and Simons, Janet, Children's Defense Fund, Washington, DC, 1985

The Data Book: The Nation, States and Cities

A summary of national, State, and large city statistics on key maternal and child health indicators including: infant mortality rates, by race; the percentage of low birthweight births, by race; the percentage of births to adolescents; the percentage of births to women who received no prenatal care or no care until the last 3 months of pregnancy; State 1984 monthly AFDC payments as a percentage of the Federal poverty level; and the percentage of poor children who are covered by Medicaid.

(28) Kennedy, Senator Edward M., (Privately printed), Washington, DC, December 22, 1983.

Going Hungry in America Report to the Committee on Labor and Human Resources, U.S. Senate

This report summarizes hearings held in November 1983 by Senator Kennedy who visited San Francisco, Minneapolis, Detroit, Pittsburgh, and Kentucky investigating reports of increasing hunger and the extent to which the truly needy are protected by existing Federal programs.

(29) Kleinman, Joel C., Journal of Epidemiology (11), pp. 146–154, 1982.

Indirect Standardization of Neonatal Mortality for Birthweight

This paper investigates birthweight-specific perinatal mortality rates using 1974–77 neonatal mortality and birthweight data for 202 geographic areas across the United States.

(30) Kleinman, Joel C., Public Health Service, Pub. No. 82–1232, U.S. Dept. of Health and Human Services, 1981.

Trends and Variations in Birthweight (in Health, U.S., 1981)

This article focuses on the relationships between low birthweight rates and maternal age, birth order, educational attainment, and infant mortality and morbidity.

(31) Kleinman, Joel C., Public Health Service, Pub. No. 81–1232, U.S. Dept. of Health and Human Services, 1980.

The Recent Decline in Infant Mortality (in Health, U.S., 1980)

This article discusses recent trends in infant mortality during the 1970's and related rates for the white and black populations, geographic variation in these rates and the role of birthweight in determining trends.

(32) Kotz, N., The Field Foundation, New York, NY, 1979.

Hunger in America: The Federal Response

A survey of the extent of hunger in selected poor areas in the United States in 1979. The survey focuses on the impact of food program benefits on the high-risk localities identified in 1968 by the Field Foundation, before the expansion of Federal food and nutrition programs.

(33) Lattimer, Agnes, Health and Medicine, Spring 1984

The Cook County Nutritional Surveillance Project

This article reviews a nutritional survey of pediatric patient charts in the Comprehensive Care Clinic of Cook County Hospital, Chicago, Illinois. Data was collected to determine the prevalence of nutritional abnormalities among the children in this low-income sample.

(34) Manna, Inc., Nashville, TN, November 1983.

Hunger Watch Update

An investigation of the food assistance needs of the low-income population in Nashville, Tennessee. Data is collected from local private and public food assistance agencies to determine the extent of

unmet local need and on the national drops in participation in public food assistance programs after Federal funding reductions.

(35) Maryland Governor's Task Force on Food and Nutrition Baltimore, MD, 1984.

Interim Report, 1984

A study on the nature and scope of nutritional deficiencies in Maryland, focusing on the following high risk groups: single parents, abused individuals, migrants, seasonal workers, those afflicted with catastrophic illnesses, and the long-term poor.

(36) Massachusetts Department of Public Health, Boston, MA, October 1983

1983 Massachusetts Nutrition Survey

The survey assesses the nutritional status of low-income children (6 months through 5 years and 11 months) who live in Massachusetts and utilize community health care facilities. The health department staff recommends Federal and State policies to assure prevention, early identification, and treatment of malnutrition.

(37) Metropolitan Dade Community Action Agency, Miami, FL, February 1985

Hunger in Dade County, Florida

Adopting aspects of the USDA Nationwide Food Consumption Survey, this study measures the kinds of foods actually eaten by individuals with varying demographic and socioeconomic characteristics. Dietary intake data were also collected across age and sex categories within the household (that is, infants, adolescents, pregnant/lactating women, and elderly).

(38) Michigan Department of Public Health, Food and Nutrition Advisory Commission, Lansing, MI, May 1984

A Right to Food: Food Assistance—The Need and Response

A summary of proceedings and recommendations of the Food and Nutrition Advisory Commission hearings. Data is summarized on the access to food and adequate nutrition for Michigan's low-income citizens. Policies are recommended for State and Federal income-support programs, job training, farm price supports, use of surplus commodities for feeding programs, and all Federal food assistance programs.

(39) Miller, Arden C., Pergamon Press, Elmsford, NY, Summer 1984.

The World Economic Crisis and the Children: United States Case Study

This UNICEF article reviews population, economic and health status trends in the 1960's, 1970's, and since 1980 with specific focus on the health and welfare of children in the United States. The authors make specific public policy and child health program recommendations to improve the health of low-income children.

(40) Minneapolis Foundation, Minneapolis, MN, November 21, 1983.

Emergency Needs Report: Report and Recommendations

A report determining levels of unmet need for food, employment and housing assistance, and analyzing ways to meet the need in the short and long term.

(41) Minnesota's Task Force on Emergency Food and Shelter, Office of the Governor of Minnesota, Minneapolis, MN, May 1983.

Recommendations to Eliminate Homelessness and Hunger in Minnesota

This report on the extent of hunger and homelessness in Minnesota includes recommendations for public and private initiatives to meet temporary emergency food assistance needs.

(42) National Center for Health Statistics, Monthly Vital Statistics Report, Public Health Service, U.S. Dept. of Health and Human Services, December 29, 1983.

Advance Report of Final Mortality Statistics, 1981

Final data on birth statistics for 1981, with comparisons to birth data going back to 1955.

(43) National Center for Health Statistics, U.S. Dept. of Health and Human Services, Monthly Vital Statistics Report, September 28, 1984.

Advance Report of Final Natality Statistics, 1982

A summary of final national birth data following trends since 1920. The low birthweight data is reported by race, age, and State and a discussion of trends from 1981–82 and between groups.

(44) National Center for Health Statistics, U.S. Dept. of Health and Human Services, Monthly Vital Statistics Report, December 20, 1984.

Advance Report of Final Mortality Statistics, 1982

A summary of total deaths and death rates by cause, age, race, and State. Infant mortality data and neonatal (under 28 days) mortality is reported by race, sex, region, and State.

(45) Northern California Anti-Hunger Coalition, Sacramento, CA, December 1984.

Hunger Survey

Results of a survey of 119 recipients of emergency food assistance in San Francisco, Alameda, and Santa Cruz Counties to determine their income available for food, the frequency and duration of participation in emergency food programs, and the causes of participants' need for food assistance such as adequacy of food benefits and loss of employment.

(46) Nutrition Subcommittee, Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, April 6, 1983.

Oversight on Nutritional Status of Low-Income Americans in the 1980's

This hearing examines the nutritional status of low-income persons as documented by Federal and State agencies and private, nonprofit organizations. Specifically, testimony is heard on the WIC Program, Food Stamp Program, and Child Nutrition Programs.

(*47*) Office of Health Resources Opportunity, U.S. Dept. of Health and Human Services, 1979.

Health Status of Minorities and Low-Income Groups

This report summarizes data collected nationwide on the general health status and health care utilization patterns of minorities and low-income groups.

(*48*) O'Hare, William P., Population Reference Bureau, Inc., Vol. 40, No. 3, June 1985.

Poverty in America: Trends and New Patterns

This population bulletin presents an overview of changes since 1959 in the size and characteristics of the poverty population. The focus is particularly on the period from 1978 to 1983.

(*49*) Oklahoma IMPACT, Oklahoma City, Winter 1982-83.

Hunger and Malnutrition in Oklahoma

A survey of hunger and malnutrition in Oklahoma including data on poverty, on increases in requests for emergency food assistance, and on the percentage of eligible persons at high nutritional risk receiving Federal food assistance.

(*50*) Oversight and Public Assistance and Unemployment Compensation Subcommittees, Committee on Ways and Means, U.S. House of Representatives, October 17, 1983.

Background Material on Poverty

This committee report (1) describes the official poverty line and other measures of poverty, (2) compiles trends in the poverty rate overall and in selected population subgroups, (3) describes the major 1981 budget reductions and the changes in real values of public assistance benefits, and (4) proposes Federal policy recommendations to reduce poverty.

(*51*) Oversight and Public Assistance and Unemployment Compensation Subcommittees, Committee on Ways and Means, U.S. House of Representatives, July 25, 1984.

Effects of the 1981 OBRA Welfare Changes and the Recession on Poverty

This report, prepared by the Congressional Research Service, is an analysis of the relative effects of the recessionary economy versus the OBRA welfare changes upon the size, composition, and real incomes of the poverty populations.

(*52*) Physician's Task Force on Hunger in America, Harvard University School of Public Health, Boston, MA 1985.

Hunger in America: The Growing Epidemic

A report of research funded by 12 philanthropic foundations reviewing national, State, and local written reports on hunger in America as well as documentation of testimony and observations on hunger and malnutrition received by physicians and public health experts who traveled to urban and rural areas in Alabama, Mississippi, Tennessee, North Carolina, New Mexico, Texas, Illinois, and Missouri.

(*53*) Pollitt, E., Leibel, Rudolph L., and Greenfield, Daryl B., Nutrition and Behavior, Vol. 1, pp. 137–146, 1983.

Iron Deficiency and Cognitive Test Performance in Preschool Children

This study demonstrates that mildly iron-deficient 3- to 6-year-old children exhibited poorer learning tasks than the controls with normal iron levels.

(*54*) Pollitt, Ernesto, University of Texas, Houston, TX, March 1985. (Chapter prepared for Nutrition Anthropology, ed. Francis E. Johnston, published by Alan R. Liss, Inc., New York, 1985.)

Effects of Iron Deficiency With and Without Anemia on Mental Development Among Infants and Preschool Children

A review of the literature on the effects of iron deficiency on cognitive development with conclusions of significance to public health and educational policies.

(*55*) Popkin, Barry M. and Lim-Ybanez, Marison, Social Science and Medicine 16: 53–61, 1982.

Nutrition and School Achievement

This paper summarizes the findings of a study on children in three urban and three rural public schools in the Phillipines to determine the strength of the detrimental effects of poor nutrition among children on their learning ability and school achievement levels.

(*56*) Population Reference Bureau, Inc., Population Bulletin (31) No. 1, April, 1976.

Infant Mortality—Progress and Problems

This publication discusses the measurement, trends, differentials, and country comparisons of infant mortality rates. It provides insight, as well, into the causes for the declines in infant mortality rates in the United States over the past 10 years and prospects for reducing the rates in less-developed countries.

(*57*) Population Reference Bureau, Inc., Washington, DC, 1983.

The United States Population Data Sheet, Third Edition

A compilation of population statistics, vitality, mortality, unemployment, and other census data for the United States in the early 1980's by region and individual States.

(*58*) Public Health Service, U.S. Depart. of Health, Education, and Welfare, 1979.

Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention (Report and Background Papers)

A report by the health agencies of the Department of Health, Education, and Welfare, with contributions from the National Academy of Sciences Institute of Medicine. Julius B. Richmond, U.S. Surgeon General and Assistant Secretary for Health reports on the health status of the Nation, risk factors responsible for the major diseases and mortality in this country. The Surgeon General identifies national priorities for improving the health of the Nation

and specifies measurable health outcome goals to be reached by 1990. (Background papers are available under separate cover.)

(59) Rural Development, Oversight, and Investigations Subcommittee, Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, June 13, 1983.

Effectiveness of Federal Food, Nutrition, and Surplus Commodity Distribution Program (Denver, Colorado)

Testimony from Senate hearings on the extent of increased demand for emergency food assistance and the effectiveness of the Commodity Distribution and Food Stamp Programs.

(60) Sanders, Alan. Food Research and Action Center, Washington, DC, January 5, 1984.

The Widening Gap

This is a nationwide study reporting final data from 36 States and 60 cities and urban counties on infant mortality rates, low birthweight rates and adequacy of prenatal care for the period 1978–83.

(61) Southern Governor's Association, Southern Regional Task Force on Infant Mortality, Washington, DC, February 24, 1985.

Southern Regional Task Force on Infant Mortality: Interim Report

This task force report is the result of a policy statement by the Southern Governors' Association to address the problem of high infant mortality rates in the South. The interim report contains the most current data on infant mortality trends in the South (17 States, 2 territories, and the District of Columbia), and broad, preliminary recommendations to reduce infant mortality. A follow-up final report will include more and specific recommendations for action.

(62) Texas Senate Interim Committee on Hunger and Nutrition, Austin, TX, November 30, 1984.

Faces of Hunger in the Shadow of Plenty

A study documenting the growing need in Texas for Federal, State, and private food assistance from 1980 to 1984. Report recommends State actions to increase food assistance, nutrition education, and develop a statewide nutrition monitoring and surveillance program, as well as for cooperative efforts between the public and private sector.

(63) Trowbridge, Frederick L., Center for Disease Control Surveillance, Summaries (32) No. 4SS, 1983.

Prevalence of Growth Stunting and Obesity: Pediatric Nutrition Surveillance System, 1982

This report describes the prevalence of growth stunting and obesity among low-income children surveyed by the 1982 Pediatric Nutrition Surveillance System. The objectives of the report are to provide States with information to identify the location and extent of nutrition-related health problems in low-income children and to monitor trends in prevalence over time.

(64) U.S. Conference of Mayors, Washington, DC, June 1983.

Hunger in American Cities

A study of the problems of hunger and emergency food distribution in the following eight American cities: Cleveland, Denver, Detroit, Nashville, New Orleans, Oakland, Rochester, and San Antonio.

(65) U.S. Conference of Mayors, Washington, DC, October 1983.

Responses to Urban Hunger

As a follow-up to the U.S. Conference of Mayor's report, Hunger in American Cities, this report provides information on several public-private efforts to respond to the increasing demand for emergency food assistance. City efforts highlighted in this report fall into eight general categories: food banks, food drives, local public-private collections, emergency food hotlines, efforts to raise public awareness, urban gardening projects, distribution of commodities, and development of municipal food policies.

(66) U.S. Conference of Mayors, U.S. Conference of City Human Services Officials, Washington, DC, September 1984.

The Urban Poor and the Economic Recovery

A summary of survey data from human services officials in 83 United States cities on (1) the effect of the budding national economic recovery on the people served by city human service agencies, (2) the extent of poverty in these cities, (3) emergency service needs, (4) the ability of nonemergency human service programs to meet the demands placed on them, and (5) recommendations for Federal actions which could help to improve conditions in the cities.

(67) U.S. Conference of Mayors, Washington, DC, April 17, 1985.

Results of a 21 City Survey

(A study conducted at the request of Representative Leon Panetta, Chairman, Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition, Committee on Agriculture, U.S. House of Representatives.)

A compilation of survey results on the demand for emergency food assistance in 21 major U.S. cities and characteristics of the persons seeking emergency assistance.

(68) U.S. Depart. of Health and Human Services, Division of Maternal and Child Health, Bureau of Health Care Delivery and Assistance, HRSA, U.S. Public Health Service, Washington, DC, December 1984.

Effective Pregnancy and Infant Care: An Initiative to Reduce Infant Mortality in the United States

This report to program and policy planners describes the 1983 and 1984 slowdown in infant mortality and low birthweight rate declines. It also summarizes current efforts and plans by the Department of Health and Human Services to improve the delivery of maternal and infant health care by the public and private sector.

(69) U.S. General Accounting Office, April 2, 1984.

An Evaluation of the 1981 AFDC Changes: Initial Analyses

This report evaluates the effects of the Omnibus Budget Reconciliation Act of 1981 on caseload, cost of program, and on purchasing power of working and nonworking recipients.

(70) Wisconsin Nutrition Project, 1984

Hunger in Wisconsin

A study documenting hunger and food-related problems in Wisconsin. Data is compiled by county for poverty, infant mortality and low birthweight rates, and participation in AFDC, Food Stamps, General Relief, SSI, Child Nutrition Programs, WIC and EPSDT. Recommendations are proposed for action at the Federal, State, and local levels.

(71) Yanochik-Owen, Anita, RD, MA and Morrissa White, RD, MPH, American Journal of Public Health, 67, February 1977.

Nutrition Surveillance in Arizona: Selected Anthropometric and Laboratory Observations Among Mexican-American Children

A compilation of nutritional assessment data collected by the Arizona public health program in 1974 on Mexican-American children attending health department clinics.

(72) Zee, Paul, M.D., PhD, et al., Journal of the American Medical Association, Vol. 253, No. 22: 3269–3272, June 14, 1985.

Nutritional Improvement of Poor Urban Preschool Children: A 1983–1977 Companison

A summary of findings from a 1983 survey of the nutritional status of preschool children from 1,219 families living in nine south Memphis census tracts with high poverty rates. These results are compared with findings from a nutritional survey of the same community conducted in 1977. A second comparison is made of children whose families participated in the Commodity Supplemental Food Program and those whose families did not.

B. Effectiveness of Federal Food and Nutrition Programs

1. CHILD NUTRITION PROGRAMS

(73) Abt Associates, Inc., Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, February 28, 1983.

Evaluation of the Child Care Food Program. Final Report on the Congressionally Mandated Studies

This report presents findings of three studies of the Child Care Food Program (CCFP) regarding barriers to participation, administrative and food service costs, and the nutritional quality of meals served by day care centers and family day care homes in CCFP.

(74) Abt Associates, Inc., Cambridge, MA, March 15, 1984.

The Effects of Head Start Health Services: Report of the Head Start Health Evaluation, Volumes I and II

An evaluation of the Head Start Program examining the impact of the health program available to enrolled children and their fam-

ilies including the provision of medical, nutritional, dental, and mental health services; provision of preventive health services; and inclusion of the child's parent in the health care process through education and referral to outside health, nutrition, and social services.

(75) Akin, John S., Popkin, Barry M., et al., Agricultural Outlook Conference, Washington DC, U.S. Dept. of Agriculture, December 1, 1982.

Nutritional Effect of School Lunch and School Breakfast

Findings from a study contracted by USDA to determine how participation in the National School Lunch Program and School Breakfast Program affects the nutrition of school age children.

(76) Elementary, Secondary, and Vocational Education Subcommittee, Committee on Education and Labor, U.S. House of Representatives, September 28, 1983.

Oversight Hearing on Restoring Funding to the Child Nutrition Program

This hearing is on the congressional budget resolution for fiscal year 1984 to restore $150 million in entitlement funding to child nutrition programs. Testimony discusses how these funds should be restored.

(77) Mellor, John W., International Food Policy Research Institute, Washington, DC, 1984 (Reprint from Food and Nutrition), Vol. 10, November 1, 1984).

Food Aid: Reflections on a Decade of Action

This article provides statistical data on bilateral and multilateral food aid since the early 1960's. It then analyzes the impact of food-aid on economic growth, nutrition, employment, and consumption stability in the developing countries.

(78) Molnar, Agnes, Community Food Resource Center, Inc., New York, NY, October 1984.

ABC's School Meals, Access, Barriers and Consequences

This report describes New York City's school breakfast and lunch programs, why they exist, who is eligible to be served, how the programs work, to what extent they are utilized by those in need. The report also makes recommendations for increasing the utilization of these child nutrition programs to those eligible for free and reduced priced meals.

(79) Parker, Lynn, Food Research and Action Center, Washington, DC, Fall 1982.

The Impact of Child Nutrition Budget Cuts

This document reviews the nutritional problems of school age children and the nutritional impact of participation versus nonparticipation in the Federal school feeding programs. In addition, the report discusses a 1982 survey of administrators of the School Lunch and Breakfast Programs regarding the impact of the Federal budget cuts in the Child Nutrition Programs.

(80) Radzikowski, Jack, Office of Policy, Planning and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, March 1982.

The National Evaluation of School Nutrition Programs: Review of Research

This review analyzes existing studies on the operations of the school nutrition programs, the nutritional status of school-age students, and the effects of the nutrition programs on students, families, schools, and school districts.

(81) Radzikowski, Jack, Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, April 1983.

The National Evaluation of School Nutrition Programs: Final Report, Executive Summary

This report summarizes findings of the evaluation of the National School Lunch, School Breakfast, and Special Milk Programs.

(82) St. Pierre, Robert G., et al., Abt Associates, Inc., Cambridge, MA and Puma, Michael J., Office of Analysis and Evaluation Food and Nutrition Service, U.S. Dept. of Agriculture, Washington, DC, March 1985.

Evaluation of Alternatives to Commodity Donation in the National School Lunch Program: Overview and Summary of Evaluation of Findings

This report evaluates the National School Lunch Program demonstration projects which have implemented cash or letter-of credit systems as alternative food acquisition systems to the price-supported and surplus commodities presently distributed by the U.S. Department of Agriculture to schools participating in the program.

(83) U.S. General Accounting Office, February 3, 1978.

How Good Are School Lunches

A report of nutritional evaluations of school lunches served under the National School Lunch Program in Cleveland, Ohio, Los Angeles, California, and New York, New York.

(84) U.S. General Accounting Office, March 30, 1984.

Participation in the National School Lunch Program

The report analyzes participation in the National School Lunch Program during the years immediately preceding and following changes to the program made by the Omnibus Reconciliation Act of 1980 and the Omnibus Reconciliation Act of 1981.

(85) U.S. General Accounting Office, July 1977.

The National School Lunch Program—Is it Working?

A report evaluating the National School Lunch Program (NSLP) as to its objectives, that is, safeguarding the health and nutrition of the school child, and strengthening the argicultural economy by encouraging the domestic comsumption of food commodities.

(86) Whitney, Patti, California Rural Legal Assistance Fund, June 1983.

Cutting Costs in the Child Nutrition Program: The Long Range Impact of Federal Budget Cuts and How Programs are Coping

A survey of California Bay Area school lunch and breakfast, child care and summer food sponsors and their use of alternative food supplies to maintain adequate meal programs.

2. ELDERLY FEEDING PROGRAMS

(87) Akin, John S., Guilkey, David K., Popkin, Barry M., and Smith, Karen M., Journal of the American Dietetics Association, 1985 (in press).

Determinants of Elderly Nutrient Intake

This paper examines the impact of source of income, program participation, demographic and personal characteristics on the nutrient intake of a nationally representative sample of persons aged 55 and older. The individual food consumption data come from a sample of 5,615 persons obtained over a 3-day period by the U.S. Dept. of Agriculture's Nationwide Food Consumption Survey.

(88) Kirschner Associates, Opinion Research Corp., for U.S. Dept. of Health and Human Services, May 1983.

An Evaluation of the Nutrition Services for the Elderly

A report evaluating the effectiveness of the congregrate and home-delivered meal programs for the elderly.

(89) Mello, Henry J. California Democratic Congressional Delegation, Sacramento, CA, May 18, 1983.

Identification of Unmet Senior Nutrition Needs

Reviews unmet need for senior nutrition site meals in California between 1981 and 1983.

(90) O'Shaughnessy, Carol, Congressional Research Service, Library of Congress, November 10, 1983.

Targeting of Services to Specified Groups of Older Persons Under the Older Americans Act

This review details the legislative history of the Older Americans Act, including all legislative amendments.

(91) Weimer, Jon, National Economics Division, Economic Research Service, U.S. Dept. of Agriculture, January 1982.

Factors Affecting Nutrient Intake of the Elderly

This report reviews findings of a 1977 national survey investigating the influence of socioeconomic factors on nutrient consumption of adults over age 60.

3. FOOD STAMP PROGRAM

(92) Agriculture Committee, U.S. House of Representatives, June 24, 1977.

Food Stamp Act of 1977: Report Together with Supplemental Views, Dissenting Views, Minority Views, Additional Views and Including the Congressional Budget Office Estimates

The report submitted to the Committee of the Whole House on H.R. 7940, a bill to amend the Food Stamp Act of 1964, as amended, by simplifying administration, encouraging participation, eliminating fraud, and for other purposes.

(93) Akin, John S., Guilkey, David K., and Popkin, Barry M., Journal of Nutrition for the Elderly 4 (3): 25–51, Spring 1985.

Changes in Elderly Household Participation in the Food Stamp Program

This study analyzes data from the U.S. Depart. of Agriculture's 1977–78 and 1979–80 Nationwide Food Consumption Surveys to determine (1) changes in participation of the elderly in the Food Stamp Program after the elimination of the purchase requirement in January 1979, and (2) factors associated with lower participation rates of the elderly in the program.

(94) Basiotos, Panayotis P., Faculty of Graduate School, University of Missouri, Columbia, MO, December 1983.

Food Costs, Nutrient Availability, and Nutrient Intake of Food Stamp Program Eligible Households: Analysis in a Household Production Framework

Using microeconomic models, the authors analyze characteristics of households participating in the Food Stamp Program and its impact on household food costs, nutrient availability, and nutrient intake.

(95) Burke, Vee, Congressional Research Service, Library of Congress, June 1984.

Cash and Non-Cash Benefits for Persons With Limited Income: Eligibility Rules, Recipient and Expenditure Data, FY 1981–83

This report summarizes basic eligibility rules, as of May 1984, for cash and noncash programs that benefit primarily persons of limited income including 11 food programs. It also gives funding formulas, benefit levels, and, for fiscal years 1981–83, recipient numbers and expenditure data for each program.

(96) Chen, Jain-Shing A., and Johnson, Stanley R., University of Missouri (in collaboration with U.S. Dept. of Agriculture), December 1983.

Simultaneous Equation Models with Qualitative Dependent Variables: A Food Stamp Participation and Food Cost Analysis

This study examines the relationship between Food Stamp Program participation and total food costs for families.

(97) Consumer Nutrition Program, Human Nutrition Information Service, U.S. Dept. of Agriculture, August 1983.

The Thrifty Food Plan, 1983

This report analyzes the nutritive value, cost of food, and food consumption patterns considered in USDA's 1983 revision of its Thrifty Food Plan.

(98) Domestic Marketing, Consumer Relations, and Nutrition Subcommittee, Committee on Agriculture, U.S. House of Representatives, April 20, 1983.

51-559 O—85——3

Review of Fiscal Year 1984 Budget for the Food and Nutrition Service, U.S. Department of Agriculture

This hearing discusses the fiscal year 1984 budget for the Food and Nutrition Service of the U.S. Dept. of Agriculture. Testimony is heard from the administration on its fiscal year 1984 legislative proposals for programs that fall within the subcommittee's jurisdiction, primarily in the area of food stamps.

(99) Human Nutrition Information Service, U.S. Dept. of Agriculture, July 1982.

Food Consumption and Dietary Levels of Low-Income Households, November 1979—March 1980 (Preliminary Reports No. 1-13)

These reports present findings on the money value, quantity, and nutritive value of food used at home for more than 2,900 low-income households. The sample consisted of households receiving food stamps and those eligible for, but not receiving, food stamps.

(100) MacDonald, Maurice, Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, February 1983.

Multiple Benefits and Income Adequacy for Food Stamp Participant and Non-Participant Households

This report examines the income effect of Government income-transfer programs, using nationally representative data from the Spring 1979 Survey of Income and Households Eligible for Program Participation.

(101) Mathematica Policy Research, (prepared for) Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Depart. of Agriculture, March 1, 1985.

Evaluation of the Nutrition Assistance Program in Puerto Rico, Volumes I and II

These reports, mandated by Congress, analyze the effects of Puerto Rico's Nutrition Assistance Program on food expenditures and nutritional adequacy of recipients and the effects on recipient benefits and participation, administrative costs and fraud and error rates.

(102) Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, June 1984.

Characteristics of Food Stamp Households: August, 1982

This USDA report summarizes the characteristics of the food stamp participant population in August 1982, as well as the benefits they received.

(103) Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, July 1982.

Preliminary Report: Characteristics of Food Stamp Households, August 1981

This report presents initial findings of a national survey of the economic and demographic circumstances of food stamp participants.

(104) Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, May 1984.

The Effect of Legislative Changes in 1981 and 1982 on Food Stamp Program Benefits, Interim Report to Congress

This interim report for Congress was mandated by the Food Stamp Act Amendments of 1982. It reviews program changes, provides basic program and economic data, and describes the net aggregate effect of program and economic changes in a preliminary form.

(105) Urban Institute (for the Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture) Washington, DC, May 1985.

The Effects of Legislative Changes in 1981 and 1982 on the Food Stamp Program, Volume I

This study, mandated by Congress in the 1982 amendments to the Food Stamp Act, collects and analyzes empirical evidence on the effects of the 1981 and 1982 legislative changes in the Food Stamp Program on food stamp caseloads, composition of the caseload, average benefits, and total program costs.

(106) U.S. General Accounting Office, February 4, 1983.

Need for Greater Efforts to Recover Costs of Food Stamps Obtained Through Errors or Fraud

This report to the Congress discusses problems relating to erroneous issuances of program benefits and the need to recover costs incurred.

(107) U.S. General Accounting Office, September 11, 1984.

Better Wage-Matching Systems and Procedures Would Enhance Food Stamp Program Integrity

This report summarizes the results of GAO's review of the Food and Nutrition Services' administration and State implementation of the Food Stamp Program's wage-matching requirement.

4. SUPPLEMENTAL FEEDING PROGRAM FOR WOMEN, INFANTS, AND CHILDREN (WIC) AND COMMODITY SUPPLEMENTAL FOOD PROGRAM (CSFP)

(108) Agriculture, Nutrition, and Forestry Committee, U.S. Senate, March 15 and April 9, 1984.

Evaluation and Reauthorization of the Special Supplemental Food Program for Women, Infants, and Children (WIC)

This document contains testimony presented at two hearings on the fiscal year 1985 reauthorization of the WIC Program. The hearings include statements from physicians, nutrition and public health program administrators, nutritionists, and program evaluation researchers.

(109) Carabell, D., et al., Yale University School of Medicine, New Haven, CN, 1978.

An Evaluation of a Supplementary Feeding Program for Women, Infants and Children. Final Report

Infant mortality, infant growth, and growth among kindergarten children were assessed and linked to WIC records to assess the health effectiveness of participation in WIC.

(110) Centers for Disease Control, Nutrition Section, Public Health Service, U.S. Dept. of Health and Human Services, 1978.

CDC Analysis of Nutritional Indices for Selected WIC Participants

This is a major analysis of the impact of WIC on children using the CDC Nutrition Surveillance System in Arizona, Kentucky, Tennessee, Washington, Oregon, and Montana and a control group of non-WIC participants.

(111) Children, Youth, and Families Select Committee, U.S. House of Representatives, September 26, 1983.

Children, Youth, and Families in the Midwest (Saint Paul, Minnesota)

This hearing discusses the concerns of providers and recipients from various education and welfare agencies on the current status of children, youth, and families in their regions.

(112) Children, Youth, and Families Select Committee, U.S. House of Representatives, June 30, 1983.

Prevention Strategies for Healthy Babies and Healthy Children

Nine expert witnesses report on strategies to prevent infant mortality, low birthweight, and mental handicaps, focusing on public policy implications.

(113) Collins, T., et al., Appalachian Region Commission Report, University of Alabama, Tuscaloosa, AL, 1981.

Integration of WIC Program with Other Infant Mortality Programs: Final Report

This report compares WIC participants to controls as to number of clinic visits, hematologic indices, weight gain during pregnancy, birthweight, interest in nursing, alcohol intake, and smoking.

(114) Collins, Terrence, R., M.D., et al., Southern Medical Journal, Vol. 78, No. 5, May 1985.

Supplemental Food Program: Effects on Health and Pregnancy Outcome

This publication summarizes the findings of a study of 519 pregnant women attending public health clinics in six Alabama counties. The study compared women at nutritional risk and participating in WIC to those not at nutritional risk and not participating in WIC as to health-related practices, health knowledge, practices, health knowledge, weight gain during pregnancy, and the birth weight of their infant.

(115) Deterding, J., et al., University of Nebraska Medical Center, Omaha, NE, 1983.

The Benefits of the WIC Program in Three Indian Communities

Researchers evaluated the growth patterns and hemoglobin values of Indian children enrolled in WIC Programs from three tribes in northeastern Nebraska.

(116) Development Associates, Inc., Food and Nutrition Service, U.S. Dept. of Agriculture, 1979.

Evaluation of the WIC Migrant Demonstration Project: A Final Report

This evaluation for USDA of the WIC Migrant Demonstration Project assesses its provision of health services to migrants, the effectiveness of its administration and barriers to participation.

(117) Edozien, J. C., et al., University of North Carolina, School of Public Health, Chapel Hill, NC, 1976.

Medical Evaluation of the Special Supplemental Food Program for Women, Infants, and Children

Researchers conducted a study of over 4,000 pregnancies and 18,000 infants and children in 19 WIC projects in 14 States from 1973 through 1976. They evaluated nutrient intake data, birthweights, children's weight and height, infant head circumference, and biochemical indices of iron status.

(118) Food Research and Action Center, Washington, DC, 1983.

WIC: A Success Story

This publication provides basic background information on the Supplemental Food Program for Women, Infants, and Children including its services and operation. It also reviewed major studies conducted between 1978 and 1982 on the effectiveness of the program.

(119) Goldberg, H. S., The Mount Sinai Medical Center, New York, NY, 1982.

An Evaluation of the Effectiveness of the WIC Program in Terms of Height, Birthweight, Weight and Hematocrit

This study analyzes the effectiveness of WIC on health measures of infants and children living in Harlem and participating in WIC for various lengths of time.

(120) Haddad, Lawrence and Willis, Cleve, Stanford Research Institute, Palo Alto, CA, February 1983.

Determinants of Early Enrollment in Supplemental Food and Nutrition Programs for High Risk Pregnant and Lactating Women in Massachusetts

Using data gathered in the 1978 Massachusetts WIC study, this report evaluates means for encouraging earlier enrollment for high risk pregnant women.

(121) Heimendinger, G., Harvard University (unpublished report), 1981.

The Effect of WIC on the Growth of Infants and Children: The Use of Growth Standards in Assessing WIC Impact on Infants and Children.

This program evaluation measures the effect of WIC on weight and height of infants and children in Boston, Massachusetts.

(122) Hicks, L., Langham, R. A., and Takenaka, J., American Journal of Public Health, October 1982.

Cognitive and Health Measures Following Early Nutritional Supplementation: A Sibling Study

This study evaluates the difference in cognitive impact of WIC on sibling pairs. The older siblings represent those entering WIC after age 1, while the younger siblings were those on WIC since the mother began the WIC Program.

(123) Kennedy, E. T. and Gershoff, S., Journal of American Dietetic Association, 1982.

Effect of WIC Supplemental Feeding on Hemoglobin and Hematocrit of Prenatal Patients

This article reports findings of a Harvard University evaluation of the effect of WIC participation on hematologic values of pregnant women.

(124) Kennedy, E. T., et al., Journal of American Dietetic Association, March 1982.

Evaluation of the Effect of WIC Supplemental Feeding on Birthweight.

An evaluation of the effect of WIC participation on birthweight at nine public health sites in Massachusetts from January 1973 to February 1978.

(125) Kotelchuck, M., et al., Massachusetts Department of Public Health, Boston, MA, 1981.

Massachusetts Special Supplemental Food Program for Women, Infants, and Children (WIC) Evaluation Project: Final Report

Authors compare the outcome of pregnancy of 4,126 WIC recipients in 1978 to that of women who had not been enrolled in WIC but matched on several characteristics from their children's birth certificates.

(126) Kotelchuck, M., et al., Massachusetts Department of Public Health, Boston, MA, 1982.

Massachusetts Special Supplemental Food Program for Women, Infants and Children (WIC) Follow-Up Study: Final Report

This follow-up to the 1981 Massachusetts study links the records of the latest birth for both WIC mothers and controls to the births studied in the previous evaluation. In this way, change in birth outcome was contrasted for WIC recipients and controls.

(127) Langham R. A., et al., Louisiana State Health Department New Orleans, LA, 1975.

Impact of the WIC Program in Louisiana

This statewide study evaluates the impact of WIC on children's growth and iron status.

(128) Missouri Department of Social Services, Division of Health Center for Health Statistics, Jefferson City, MO, 1984

Evaluation of the Missouri WIC Program: Prenatal Component

This paper examines the effect of WIC prenatal supplementation on pregnancy outcome and the variable effect of length of participation in WIC on pregnancy outcome.

(*129*) Missouri Department of Social Services, Division of Health, Jefferson City, MO, 1984

WIC Prenatal Participation and Its Relationship to Newborn Medicaid Costs in Missouri: A Cost/Benefit Analysis

This evaluation of WIC was performed using 7,628 Missouri Medicaid records matched with their corresponding birth records. The study examines to what extent WIC prenatal participation reduces Medicaid costs within 30 days of birth and whether the reduction is greater than the WIC costs for these women.

(*130*) Monrad, Diane, et al., Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept, of Agriculture, December 1982.

Evaluation of the Commodity Supplemental Food Program. Final Report: Health and Nutrition Impacts of Three Local Projects

This evaluation collected retrospective data from two Commodity Supplemental Food Programs (CSFP) project sites in Memphis, Tennessee and one in Detroit, Michigan, which included 2,754 participants. The study measures the health and nutrition impact of CSFP on all participants, variations in impact by the number of CSFP visits and the time of inception of participation, and the relative impact for those identified as "high risk".

(*131*) National Advisory Council on Maternal, Infant and Fetal Nutrition Food and Nutrition Service, U.S. Dept. of Agriculture, January 1983.

National Advisory Council on Maternal Infant, and Fetal Nutrition: 1982 Biennial Report

This Council report presents recommendations to the President and the Congress to enhance the administration and operation of both WIC and Commodity Surplus Food Programs.

(*132*) Nutt, P. C., Wheeler, M., and Wheeler, R. A., Ohio State University, Columbus, OH (unpublished report), 1981

Social Program Evaluation Revisited: The WIC Program.

This evaluation of WIC in Columbus, Ohio examined differences in birthweight for infants born to WIC participants versus a control group, both delivering at the same hospital.

(*133*) Office of Human Development Services, U.S. Depart. of Health and Human Services, July 1983

National Report: 1982 State Conferences on Children and Youth

The report is a summary of conferences held in 45 States following the 1980 White House Conference on Children and Youth. Conference themes included the following subjects: employment, child care, health, child welfare services, education, child abuse/neglect, juvenile justice/delinquency, private sector involvement, volunteerism, alcoholism/drug abuse, and teenage pregnancy.

(*134*) Office of Policy, Planning and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, 1981.

Evaluation of the Effectiveness of WIC

This is a review of several large-scale studies which measure the effectiveness of the WIC Program.

(*135*) Paige, D., Johns Hopkins University, Department of Maternal and Child Health, Baltimore, MD, 1983

Evaluation of the WIC Program on Infants on the Eastern Shore of Maryland

This evaluation measures the effect of WIC participation on infant feeding practices, morbidity, growth, hematology and immunization rates.

(*136*) Pelto, J. M., Alaska Medicine, Alaska State Medical Association, Anchorage, AK, 1982

Results of a Nutrition Intervention Prevention Program: The WIC Program in Alaska

This report assesses the impact of the WIC Program on two urban communities in Alaska, with specific measurement of the impact on hemoglobin values and incidence of low birthweight.

(*137*) Popkin, Barry M., and Akin, John, et al., Institute for Research on Poverty, University of Wisconsin, Madison, WI, November 1980.

Nutrition Program Options for Maternal and Child Health

This paper summarizes nutritional needs of the maternal and child health (MCH) populations and the Federal food and nutrition programs designed to meet these needs. The report was originally conducted for the Senate Select Panel for the Promotion of Child Health, to aid the panel in recommendations for MCH Programs and policies.

(138) Rosenberg, M. J., McCarthy, B. J., and Terry, J. S., Centers for Disease Control, U.S. Dept. of Health and Human Services (unpublished report), 1981.

The Effect of the WIC Program on Infant Mortality in Rural Georgia

The evaluation links WIC, birth and death records to assess the impact of WIC on birthweight and infant mortality in a rural area of Georgia in 1977–78.

(139) Rye, J., White, M., and Majchrzak, M., Arizona State WIC Program, Tucson, AZ (unpublished report), 1978.

Intervention Outcomes in Arizona's WIC Program, July 1976 Through March 1977

This State report reviews birthweight, biochemical and anthropometric data of Arizona's WIC participants in 1976–77 and 1977–78.

(140) Schelzel, G. and Britton, M. A., Pennsylvania Health Department, Harrisburg, PA (unpublished report), 1978.

An Assessment of the WIC Program in Pennsylvania

This program evaluation examines pregnancy outcome and nutritional risk criteria for WIC participants in Pennsylvania, comparing status at entry into the program with status at recertification.

(141) Schramm, W. F., Missouri Center for Health Statistics, Jefferson City, MO, 1983.

WIC Prenatal Participation and Its Relationship to Newborn Medicaid Costs in Missouri: A Cost/Benefit Analysis

This report includes a cost-benefit analysis of WIC. Costs and medical benefits of WIC are compared savings in medical expenses for infants born to WIC mothers.

(142) Select Panel for the Promotion of Child Health, Public Health Service, U.S. Dept. of Health and Human Services, 1981.

Better Health for Our Children: A National Strategy, Vol. I

Major findings and recommendations of the Select Panel for the Promotion of Child Health, mandated in 1979–80 by Congress to assess the unmet needs in U.S. child and maternal health.

(143) Silverman, P. R., Kuller, L. H., and Kolodner, D. C., Allegheny, Pennsylvania County Health Department (unpublished report), 1982.

The Effect of a Local Prenatal Nutrition Supplemental Program (WIC) on Birthweight

This local Health Department report compares birthweights of low-income women delivering before and after the introduction of WIC in Allegheny County, Pennsylvania.

(144) Stockbauer, J. and Blount, C. R., Missouri Department of Social Services, Division of Health, Jefferson City, MO, 1983.

Evaluation of the Prenatal Participation Component of the Missouri WIC Program

This study compares birth outcomes of prenatal WIC recipients in Missouri in 1980 with that of nonparticipants, using State birth, fetal and infant death linked data, including prenatal history.

(145) U.S. General Accounting Office, February 1979.

The Special Supplemental Food Program for Women, Infants, and Children (WIC), How Can It Work Better?

A report on the nature and frequency of services provided to program participants including nutrition education, health services and tailoring of food packages.

(146) U.S. General Accounting Office, January 30, 1984.

WIC Evaluations Provide Some Favorable But No Conclusive Evidence on the Effects Expected for the Special Supplemental Program for Women, Infants, and Children

This report to the Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, analyzes and summarizes the conclusions of major WIC Program evaluations.

5. SURPLUS COMMODITY DISTRIBUTION PROGRAM

(147) Becker, Geoffrey S., Congressional Research Service, Environment and Natural Resources Policy Division, Library of Congress, March 26, 1984

USDA's Commodity Inventory

This report describes how the Federal Government acquires and disposes of surplus commodities and reports on commodities held in inventory as of March 1984.

(148) Becker, Geoffrey S., Congressional Research Service Review, Library of Congress, July/August 1984.

U.S. Dairy Surplus Will Persist in 1985 Despite New Legislation

This article examines the underlying causes of the U.S. dairy surplus and options for diminishing the surplus.

(149) Domestic Marketing, Consumer Relations, and Nutrition Subcommittee, Committee on Agriculture, U.S. House of Representatives, March 22, 1983.

Emergency Food Assistance and Commodity Distribution Act of 1983

This hearing discusses H.R. 1590, a bill to provide emergency food assistance to low-income and unemployed persons and to improve the Commodity Distribution Program.

(150) Domestic Marketing, Consumer Relations, and Nutrition Subcommittee, Committee on Agriculture, U.S. House of Representatives, August 3, 1983.

Review of the Surplus Commodity Distribution Program

This hearing reviews and evaluates the operations of the Surplus Commodity Distribution Program in 1983.

(151) Government Operations Committee, U.S. House of Representatives, July 27, 1983.

Hearings: Review of USDA's Surplus Dairy Products Donation Program

These hearings explore the reasons why in early 1983 the distribution of cheese owned by the Commodity Credit Corp. was reduced from 60 million to 25–35 million pounds per month.

(152) Government Operations Committee, U.S. House of Representatives, October 27, 1983.

USDA's Cheese Distribution: A Good Program Gone Wrong

The committee reports on the administrative problems of the USDA Cheese Distribution Program.

(153) Nutrition Subcommittee, Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, July 12, 1983.

Oversight on Commodity Distribution Program

This hearing examines the effectiveness of the current Commodity Distribution Program, enacted under the Jobs bills as the Temporary Emergency Food Assistance Program.

(154) Office of Analysis and Evaluation, Food and Nutrition Service, U.S. Dept. of Agriculture, March 1983.

An Assessment of Nutrition Assistance Programs Including the Procedures Required to Reinstate Direct Commodity Distribution to Needy Households

This report, requested by the Appropriations Committee of the U.S. House of Representatives, describes the administrative procedures needed to reinstate the direct distribution of agricultural commodities to meet the food needs of the poor in the United States.

(155) U.S. General Accounting Office, September 16, 1977.

Food Waste: An Opportunity to Improve Resource Use

This report discusses the Department of Agriculture's past and current activities concerning food loss in the United States, as well as a broader assessment of food loss in the U.S. food production chain.

(156) U.S. General Accounting Office, December 20, 1983.

Government-Owned Surplus Dairy Products Held in Inventory

This report discusses USDA's dairy surplus inventory in 1983.

(157) U.S. General Accounting Office, March 14, 1984.

Improved Administration of Special Surplus Dairy Product Distribution Program Needed

This report makes recommendations for improvements needed in the administration of the special Dairy Product Distribution Program.

(158) U.S. General Accounting Office, July 9, 1981.

More Can Be Done to Improve the Department of Agriculture's Commodity Donation Program. CED-81-83

This report summarizes findings on the effectiveness of USDA's Commodity Distribution Programs with recommendations for improved program operation.

6. PRIVATE VOLUNTARY AND CORPORATE INITIATIVES

(159) Food Marketing Institute, Washington, DC, October 4, 1984.

Private Sector Initiatives to Feed America's Poor (Statement for the Committee on Agriculture, Nutrition, and Forestry, U.S. Senate.)

A summary of the Food Marketing Institute's survey of its 17,000 retail food stores on their involvement with Surplus Food Distribution Programs.

(160) Interfaith Action for Economic Justice, Washington, DC, November 16, 1983.

Testimony Before the President's Task Force on Food Assistance

This statement represents the views of national religious organizations regarding the extent of hunger in the United States and the deficiencies in the financial capability of the private, religious sector to provide food to meet the need.

(161) Rhode Island Community Food Bank, Providence, RI, May 1984.

Hunger in Rhode Island

This is the second statewide survey of private, nonprofit agencies that operate emergency food programs in Rhode Island. 118 agen-

cies which have the responsibility for operating 132 programs participated in the survey. The survey was conducted to measure the increased use of temporary emergency food programs and to uncover the reasons why people make use of these services.

(162) Social and Scientific Systems, Inc., Food and Nutrition Service, U.S. Dept. of Agriculture, May 1983.

A Report on Nine Case Studies of Emergency Food Assistance

This report includes case studies of nine food banks to provide data for USDA on the seasonal and economic factors which affect the donation of food and the requests for food assistance. Descriptive data on structure and function of food pantries are discussed to evaluate problems they have in accepting surplus commodities.

(163) U.S. General Accounting Office, June 23, 1983.

Public and Private Efforts to Feed the Poor

In response to a congressional request, GAO provided information on: (1) the Nation's economic climate and its impact on food assistance needs; (2) some of the efforts occurring at Federal, State, local, and private levels to meet these needs, including the channeling of surplus food to the poor and hungry; and (3) some of the impediments which inhibit a more effective and efficient food assistance system.

7. GENERAL

(164) Children's Defense Fund, Washington, DC, 1984.

A Children's Defense Budget—An Analysis of the President's FY 1985 Budget on Children

This publication discusses all Federal programs which effect children. In addition, it discusses past and present funding of these programs and recommendations for making them more responsive to the needs of children.

(165) Domestic Marketing, Consumer Relations, and Nutrition Subcommittee, Committee on Agriculture and Elementary, Secondary, and Vocational Education Subcommittee, Committee on Education and Labor, U.S. House of Representatives, with the Nutrition Subcommittee, Committee on Agriculture, Nutrition, and Forestry, U.S. Senate, January 26, 1984.

Review of the Report of the President's Task Force on Food Assistance

This hearing examines the report of the President's Task Force on Food Assistance.

(166) Domestic Marketing, Consumer Relations, and Nutrition Subcommittee, Committee on Agriculture, U.S. House of Representatives, June 20, 1983.

Review of the Nutrition Assistance Program for Puerto Rico

Witnesses in this hearing discuss the block grant Nutrition Assistance Program in Puerto Rico, and the effect of 1981 congressional budget reductions on the overall food assistance programs of Puerto Rico.

(167) Food Research and Action Center, Washington, DC, June 1984.

Glut of Hunger—An Analysis of Federal Food Programs

This report summarizes the history of the Federal Food Assistance Programs, their participation requirements, participation data, and program effectiveness. Authors make recommendations to improve program quality and expand program participation.

(168) President's Task Force on Food Assistance, U.S. Government Printing Office, January 18, 1984.

Report of the President's Task Force on Food Assistance

This report is the final result of Executive Order 12439 with the following mandate: "The Task Force shall analyze Federal and other programs intended to render food assistance to the needy and shall make recommendations to the President and the Secretary of Agriculture with respect to how such programs may be improved."

II. INTERNATIONAL

A. Extent of Hunger

(169) Africa Subcommittee, Committee on Foreign Affairs, U.S. House of Representatives, Washington, DC, March 17, 22; April 13, 1983.

Foreign Assistance Legislation for Fiscal Years

The subcommittee held hearings to discuss authorization legislation on economic and security assistance programs for Africa for fiscal years 1984–85. The subcommittee recommendations attempt to respond to the current Africa crisis by restoring a mix of economic and military assistance to favorably reflect U.S. interests in Africa.

(170) Agriculture Committee, U.S. House of Representatives, Washington, DC, July 21, 22, and 23, 1981.

World Hunger Situation

These hearings discuss the world hunger problem and the role that private voluntary organizations and Government agencies have in providing development and humanitarian assistance and programs.

(171) Alnwick, David, UNICEF, Social Statistics Bulletin, 3, No. 1, 1980.

The Weight, Length and Upper Arm Circumference of Kenyan Children in Nairobi Nursey Schools

This article summaries a nutritional survey of 972 well-nourished Kenyan children between 3 and 7 years old, comparing the weights and lengths of these children to the standard reference charts used for American children of the same age. The authors find that the distribution of length and weight by age is very similar for both groups.

(172) Bachman, Kenneth L., and Paulino, Leonardo A., International Food Policy

Rapid Food Production Growth in Selected Developing Countries: A Comparative Analysis of Underlying Trends, 1961–76

This study analyzes 16 of 24 developing market economies whose food production growth rates exceeded 3.3 percent per year in the 1961–76 period. It attempts to identify sources of growth in these countries.

(*173*) Bale, Malcolm, and Duncan, Ronald C., American Economic Review, V. 73, May 1983.

Food Prospects in the Developing Countries: A Qualified Optimistic View

This article suggests that in the aggregate, the growth in food production over the past two decades has more than kept pace with the growth in population along with improvements in capita consumption among the developing nations with the exception of sub-Saharan Africa.

(*174*) Bale, Malcolm D., and Duncan, Ronald C., World Bank, Washington, DC, 1983.

Prospects for Food Production and Consumption in Developing Countries

This paper analyzes recent trends in world food production and consumption with special reference to developing countries.

(*175*) Barr, Terry N., Science Journal, Vol. 214, December 4, 1981.

The World Food Situation and Global Grain Prospects

This paper reviews the world food situation with particular reference to the problems and propects of world grain production.

(*176*) Bell, Frederick W., Westview Press, Boulder, CO, 1978.

Food from the Sea: The Economics and Politics of Ocean Fisheries

This book examines what forces determine the current supply and demand for fishery products, and what steps are needed to fully utilize the sea as a source of food. It is a comprehensive treatment of the economics of fishery development.

(*177*) Bigman, David, Ballinger Publishing Co., Cambridge, MA, 1982

Coping with Hunger: Toward A System of Food Security and Price Stabilization

The aim of this book is to take a step beyond the outlining of general strategies for coping with the food problem and discusses specific tactics and precise policy measures that make up an overall strategy to alleviate hunger.

(*178*) Bread for the World, Washington, DC

Monthly Newsletters and Background Papers on Issues Related to International and Domestic Hunger

This citizen's advocacy organization publishes a monthly newsletter, background papers, and other publications related to world hunger issues. Topics include agricultural policy, trade policies, domestic food assistance programs, and foreign assistance programs.

(*179*) Brown, Lester R., Science, Vol. 214 p. 7, November 1981.

World Population Growth, Soil Erosion and Food Security

This paper analyzes world food production, increasing soil erosion, increasing population, and the ability of the world to feed itself.

(*180*) Brown, Lester R. et al. W. W. Norton & Co., New York, 1985.

State of the World 1985, a Worldwatch Institute Report

A second annual assessment by Worldwatch Institute of progress toward a sustainable global society covering hunger, population, energy, and related issues.

(*181*) Byron, William, Paulist Press, New York, NY, 1982.

The Causes of World Hunger

This series of essays on causes of hunger includes critiques of trade policies, the arms race, the population dilemma, maldistribution of wealth, and other topics.

(*182*) Carter, James P., Pergaman Press, Elmsford, NY, Proceedings of the Conference of a Working Group on Famine in Africa, held at Kinshasa, Zaire, January 1980.

Famine in Africa

These findings of a conference on famine in Africa review the causes of famine, and make recommendations for international cooperation in alleviating chronic and acute food shortages.

(*183*) Chambers, Robert, World Bank, Washington, DC, 1980

Rural Poverty Unperceived: Problems and Remedies

A background study for the 1980 World Development Report which examines the major obstacles to perceiving the nature and the extent of rural poverty in developing countries. Study also makes policy recommendations for rural development projects.

(*184*) Committee on World Security, Food and Agriculture Organization of the United Nations, Oct.—Nov. 1980.

Objective Indicators to Signal Acute and Large-Scale Food Shortages: Selected Approaches

An ad hoc working party on preparedness of acute and large-scale food shortages was set up by the FAO Committee on World Food Security in the spring of 1980 to examine, among other things, the formulation of objective indicators to signal acute and large-scale food shortage situations.

(*185*) Curry, Bruce, Ali, Meht A., and Khoman, Nitaya, East-West Center, Honolulu, HI 1981

Famine: A First Bibliography

Bibliography on famine on an international level discusses nutrition, malnutrition, and food supply.

(*186*) Dando, William A., John Wiley & Sons, New York, 1980.

The Geography of Famine

The volume deals with the nature, condition, causes, and history of famine.

(*187*) Economics, Statistics, and Cooperative Service, U.S. Depart. of Agriculture, Foreign Agriculture Economic Report No. 159, Washington, DC, July 1980.

Global Food Assessment, 1980

A compilation of data on food production and the 1980 outlook for 79 low- and middle-income countries; and descriptions of international and U.S. food aid policies.

(*188*) Economic Research Service, U.S. Dept. of Agriculture, 1983.

World Indices of Agriculture and Food Production, 1973–82

This report contains indices of total and per capita agricultural and food production for 1973–82 for 109 countries and the world.

(189) Economic Research Service, U.S. Dept. of Agriculture, Washington, DC, July 1984.

World Food Aid Needs and Availability, 1984

A country specific and aggregate examination of world food supplies and food aid needs for program policy officials.

(*190*) Eicher, Carl K., Foreign Affairs, Vol. 61,-pp. 151–174, Fall 1982.

Facing Up to Africa's Food Crisis

This article decribes Africa's food program in terms of deteriorating production levels, population increases, and low-income levels.

(*191*) Falcon, Walter, W., American Agricultural Economics Association, December 1981.

Reflections on the Presidential Commission on World Hunger

This article is a critical appraisal of the Presidential Commission on World Hunger.

(*192*) Feder, Gersham, Just, Richard E., and Zilberman, David, World Bank, Washington, DC, 1982.

Adoption of Agricultural Innovation in Developing Countries: A Survey

This paper surveys theoretical developments and empirical studies examining the adoption of technological innovations by farmers in less-developed countries.

(193) Food and Agriculture Organization of the United Nations, 1977.

The Fourth World Food Survey

This survey updates the third world survey completed in 1963. It consists of two parts: Growth of Food and Agricultural Production and Food Supply, and Dimensions of Malnutrition. It examines the most recent trends in world food supply against evidence of increasing populations and incidence of undernutrition and malnutrition in developing countries.

(194) Food and Agriculture Organization of the United Nations, 1983, 1984, and 1985.

World Food Report

An annual review of the world food and agriculture situation and the activities of FAO initiated in 1983. This report is intended for use by media, nongovernmental and other nontechnical organizations. It contains summary charts on demography, production, trade, and resources.

(195) Foreign Affairs Committee, U.S. House of Representatives, Committee Print, Washington, DC, October 1984.

Feeding the World's Population: Developments in the Decade Following The World Food Conference of 1974

This study conducted by the Congressional Research Service for the Committee on Foreign Affairs is the most comprehensive review since 1974 of major developments in the world food situation. It surveys the current food and agriculture situation faced both regionally and globally, provides predictions of future food supply, and policy recommendations toward feeding the world's population.

(196) Foreign Affairs Committee, U.S. House of Representatives, 98th Congress (First Session), Washington, DC, July 26 and 27, 1983.

The World Food Situation

Hearings review the present world food situation and compare the present situation with that of the 1974 World Food Conference.

(197) Goodloe, Carol, International Economic Division, Economic Research Service, U.S. Dept. of Agriculture, November 1982.

Measuring Food Deficits and Undernutrition: An Accuracy Problem

This paper reviews recent methodological approaches used to estimate the number of undernourished people and the quantity of food needed to eliminate that undernutrition.

(198) Graham, George G., British-American Hospital, Lima, Peru, U.S. Agency for International Development, 1975.

Growth of Previously Well-Nourished Infants in Poor Homes

This report studies the effect of drastic qualitative and quantitative changes in nutrition on infant growth rates.

(199) Gwatkin, David R., Overseas Development Council, Washington, DC, February 1981.

Signs of Change in Developing Country Mortality Trends: The End of an Era?

This document presents a review of available data on the decline in improvements in mortality levels in developing countries, with a discussion of the social, economic, and health factors contributing to this decline.

(200) Hanrahan, Charles E., International Economics Division, Economic Research Service, U.S. Dept. of Agriculture, August 1983.

Food Problems and Prospectives in Sub-Saharan Africa: The Decade of the 1980's. Foreign Agricultural Economic Report No. 166

This report reviews issues related to food production and availability in the sub-Saharan region of Africa.

(201) Hanrahan, Charles E., Urban, Francis S., and Deaton, Larry J., Economic Research Service, U.S. Dept. of Agriculture, 1984.

Longrun Changes in World Food Supply and Demand: Implications for Development Assistance Policy

This study suggests that U.S. development assistance policy should focus attention on: nutrition and other aspects of well being in relation to U.S. security interests in developing countries, agricultural policies, development and dissemination of technology, and U.S. aid in relation to international lending programs.

(202) Huddleston, Barbara, International Food Policy Research Institute, Washington, DC, January 1984.

Closing The Cereal Gap with Trade and Food Aid

This report analyzes food aid's contribution to equitable growth and economic effects in specific countries.

(203) Huddleston, Barbara, International Food Policy Research Institute, Development Digest, Washington, DC, July 1983.

Estimating Food Aid Needs: How Much and To Whom?

This International Food Policy Research Institute report suggests various means of establishing criteria for food aid.

(204) International Food Policy Research Institute, Washington, DC, December 1977.

Food Needs of Developing Countries: Projections of Food Production and Consumption to 1990

This report includes projections for major staple food crops, including cereals, root crops, pulses, and groundnuts for developing market economies. It utilizes recent and long-run analyses to illustrate the effects of changes in assumptions concerning production and population growth rates.

(205) International Food Policy Research Institute, Washington, DC, 1983.

IFPRI Report, 1984

An annual report reviewing food aid and agricultural growth, food trends analysis, food production, consumption, and nutrition policies.

(206) Jegen, Mary Evelyn, and Wilber, Charles, K., Paulist Press, Ramsey, NJ, 1979.

Growth with Equity

This book is a group of essays exploring the concept of growth with equity in development from a basic human needs perspective. It presents three topics: Agricultural development, employment strategies, and international institutions.

(207) Kahn, Herman, Brown, William, and Martel, Leon, William Morrow, New York, NY, 1976.

The Next 200 Years: A Scenario for America and the World

This book reflects work at the Hudson Institute on population growth, economic development, energy, raw materials, food, and environment in the future.

(208) Kazen, Felisa M., Academy for Educational Development, Inc., Washington, DC, 1978.

Definitions and Measurements of Poverty

This report covers efforts to arrive at a methodology for estimating poverty levels in four development assistance agencies: IBRD, IDB, the Economic Commission for Latin America, and the Inter-American Foundation.

(209) Keller, W., and Fillmore, C. M., World Health Organization, Statistics Quarterly, 36, 1983.

Prevalence of Protein-Energy Malnutrition

This document is a summary of current knowledge on levels of malnutrition in developing countries.

(210) Konandreas, Panos; Huddleston, Barbara; and Ramangkura, Virabongsa, International Food Policy Research Institute, Washington, DC, September 1978.

Food Security: An Insurance Approach

This report presents two alternative insurance schemes in order to stabilize cereal consumption in food deficit developing countries. These schemes were (1) a purely compensatory financing mechanism, and (2) a financing mechanism combined with a physical wheat reserve.

(211) Lappe, Frances Moore, and Collins, Joseph, Ballantine Books, New York, 1978.

Food First-Beyond the Myth of Scarcity

This book examines the causes of hunger both internationally and domestically. It breaks away from the traditional views of hunger and asserts that hunger is caused by people losing control of their food producing resources.

(212) Lewis, Clifford W., U.S. Agency for International Development, July 1983.

Global Food Security—A Manageable Challenge

This article summarizes prospects for food security. The 100 year trend of decreasing real food costs is expected to continue. Reduction of malnutrition, often a problem in domestic income distribution rather than one of national food shortage, can be accomplished by targeted feeding programs.

(213) Lipton, Michael, World Bank, Washington, DC, 1983.

Poverty, Undernutrition and Hunger

This study draws on data from Asia and Africa to identify food-related indicators of, and distinctions among, poverty levels. Implications for nutrition policies are discussed with supporting tables and graphs.

(214) McIntire, John, International Food Policy Research Institute, Washington, DC, September 1981.

Food Security in the Sahel: Variable Import Levy, Grain Reserves and Foreign Exchange Assistance

This study discusses the cost effectiveness and income distribution effects of three policy responses to the problem of food grain consumption stabilization in the Sahel. It identifies and compares the effects of variable import levies, grain reserves, and foreign exchange assistance used jointly.

(215) McLaughlin, Martin, M., Overseas Development Council, Washington, DC, May 1982.

World Hunger or Food Self-Reliance? A U.S. Policy Approach for the 1980's

This policy report presents an overview of food availability and food consumption worldwide, with policy recommendations to alleviate hunger. Policy recommendations include short- and long-term solutions to the problems of production, distribution, and access to food.

(216) Marei, Sayed Ahmed, Longman Group LTD, London, 2d ed., 1978.

The World Food Crisis

This book addresses world food production and its correlation with increasing population demand. It also addresses specific problems of the Arab World.

(217) Mason, John B., and Mitchell, Janice T., Bulletin of the World Health Organization, 1983.

Nutritional Surveillance

This article discusses the methodology for implementing nutrition surveillance systems in developing countries. They also review the costs and benefits of using a system in planning health, nutrition, and development programs.

(218) Meadows, Donella H., et al., Universe Books, New York, 1972.

Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind

This book sets out global trends of population growth, widespread malnutrition, depletion of nonrenewable resources, accelerating industrialization and deteriorating environment. The world model presented was used to project trends under varying scenarios up to 100 years into the future.

(219) Mellor, John W., and Adams, Richard, Chemical and Engineering News, April 23, 1984.

Feeding the Underdeveloped World: Chemical Technology is Crucial in Alleviating Poverty and Hunger

This paper examines ways to increase food production in less developed countries as the way to eliminate hunger, it advocates the use of greater amounts of fertilizers (chemicals).

(220) Mellor, John W., International Food Policy Research Institute, Washington, DC, 1978.

Three Issues of Development Strategy—Food, Population, and Trade

This book examines the basic human needs thrust of U.S. foreign aid policy, and the relationship between economic development and supply and demand for agricultural commodities.

(221) National Research Council, Commission on International Relations, Board on Science and Technology, National Academy of Sciences, Washington, DC, 1978.

Postharvest Food Losses in Developing Countries

This study discusses efforts to reduce postharvest food losses. It summarizes existing information about losses of major food crops; discusses economic and social factors involved; identifies major areas of need; and suggests program and policy options for developing countries and technical assistance agencies.

(222) Newland, Kathleen, Worldwatch Institute, Washington, DC, December 1981.

Infant Mortality and the Health of Societies

This study examines the social, economic, and environmental conditions that make infants vulnerable, and outlines the changes necessary to lower infant mortality rates.

(223) Oram, Peter; Zapata, Juan; Alibaruho, George; and Roy, Shyamal, International Food Policy Research Institute, Washington, DC, September 1979.

Investment and Input Requirements for Accelerating Food Production in Low-Income Countries by 1990

This report is a study of the investment requirements needed by 36 low-income food deficit countries to close projected gaps between production and consumption. It provides judgments of how production increases can be achieved through its assessments of national and regional production potential.

(224) Overseas Development Council, Praeger Press, Inc., New York, NY.

Annual Reports

These annual reports on world development issues contain a series of essays on food production, food availability, adequacy of foreign assistance, trade policies, and other areas.

(225) Paarlberg, Robert, Overseas Development Council, 1982.

A Food Security Approach for the 1980's: Righting the Balance

This article on food policy suggests that independent national initiatives in pursuit of food security will be more successful than global food initiatives.

(226) Popkin, Barry M., and Lim-Ybanez, Marison, Social Science and Medicine, Vol. 16, pp. 53–61, 1982.

Nutrition and School Achievement

This paper summarizes the findings of a study on children in three urban and three rural public schools in the Philippines to determine the effects of poor nutrition on learning ability and school achievement levels of children.

(227) Presidential Commission on World Hunger, U.S. Government Printing Office, June 1980.

Overcoming World Hunger: The Challenge Ahead

The Commission's mandate was to identify the causes of domestic and international hunger and malnutrition, assess past and present national programs and policies that affect hunger and malnutrition, review existing studies and research on hunger, and recommend to the President and Congress specific actions to create a coherent national food and hunger policy. The Commission was also directed to help implement those recommendations and focus attention on food and hunger issues through various public education activities.

(228) Puffer, Ruth R., Pan American Health Organization, Washington, DC, 1975.

Birthweight, Maternal Age, and Birth Order: Three Important Determinants in Infant Mortality

This study reviews several factors involved in infant mortality, and determines their usefulness in the development of prevention programs.

(229) Radha, Sinha, Pergamon Press, Inc., Elmsford, NY, 1979.

The World Food Problem: Consensus & Conflict

This book contains a compilation of 27 studies addressing the issues of the world food situation.

(230) Reutlinger, Shlomo, and Alderman, Harold, World Bank, Washington, DC, 1980.

The Prevalence of Calorie-Deficient Diets in Developing Countries

This paper introduces a number of changes in methodology of measurement of malnutrition as measured by the prevalance of calorie-deficient diets. Second, it analyzes likely changes in the prevalence of calorie-deficient diets in selected countries under a variety of development policy scenarios.

(231) Schmitt, Bernard, Westview Press, Boulder, CO, 1979.

Protein, Calories, and Development: Nutritional Variables in the Economics of Developing Countries

This study traces the circular relationship between nutrition and human capital, labor productivity, food production, and per capita consumption of calories and protein. It outlines a methodology for forecasting commodity production, trade, food assistance programs, and development of alternatives to agriculture.

(232) Schuh, Edward G., American Economic Review, May 1983.

Changing Trends in World Food Production and Trade

This article discusses the need for developing countries to identify and apply cost-reducing technology to food production.

(233) Simon, Julian L., and Hudson, William J., Challenge, Nov.–Dec. 1982.

Global Food Prospects: Good News

The authors suggest that pessimistic views of the world food picture are rooted in a misreading of historical data. The paper suggests that in the long term, food production per person is rising, prices are falling, and the outlook is far from catastrophic.

(234) Srinivasan, T. N., World Bank, Washington, DC, originally published in Journal of Development Economics, 1981.

Malnutrition: Some Measurement and Policy Issues

Many of the widely used standards for assessing nutritional status, by classifying all individuals by an average norm, will misclassify individuals to varying degrees. Variations among individuals are still not fully understood and a satisfactory theoretical framework needs to be developed.

(235) Terpstra, Ellen A., Congressional Research Service, Library of Congress, Apirl 8, 1984.

Selected Indicators of Food Availability in Developing Nations: A Brief Discussion of Their Implications

This CRS paper provides a discussion of a number of indicators of world food availability used to describe the adequacy of global food supplies. These include, among others, indices of food production, calorie availability and distribution, and national food intake averages.

(236) Tudge, Colin, Faber and Faber, London, 1977.

The Famine Business

The author advocates adoption of "rational" policies in the growth and development of food based upon what the world population needs rather than what wealthy nations can economically demand.

(237) United Nations Children's Fund (UNICEF), Oxford University Press, 1984.

The State of the World's Children 1984

An annual report with updated statistics covering basic indicators and reports on techniques for reducing infant sickness and death in developing countries by the use of four methods (GOBI): growth monitoring, oral rehydration, breastfeeding, and immunizations. It also discusses programs which would improve the quality of life for children.

(238) United Nations World Food Council, February 10, 1984.

Food Strategies in Africa—Selected Case Studies (Report by the Executive Director)

This World Food Council report tells of efforts made by a selected number of African countries to cope with their food problems by adopting appropriate food strategies.

(239) U.S. General Accounting Office, January 11, 1980.

World Hunger and Malnutrition Continue: Slow Progress in Carrying Out World Food Conference Objectives

This report examines U.S. and international attempts to act on worldwide resolves regarding global hunger; seeks to raise the visibility of priority of crucial food and hunger issues; and, offers an

independent persepective on problems and progress in carrying out 1974 World Food Conference resolutions.

(240) Urban, Francis and Vollrath, Thomas, Economic Research Service, U.S. Dept. of Agriculture, 1984.

Patterns and Trends in World Agricultural Land Use

The study suggests that technological change will be essential in increasing crop production to meet the future world food needs because the world's population is increasing at a much faster rate than is the increase in useable agricultural land.

(241) Vollrath, Thomas, Timms, Dan, and Reynolds, Ellen, Economic Research Service, U.S. Dept of Agriculture, 1984.

Selected Socioeconomic Development Indicators: Africa, Asia, Europe, Latin America, the Middle East and North America/ Oceania

This report contains data on 29 development indicators for 79 countries in 6 different geographical regions. The indicators are contained in 162 tables that carry various indicators of agricultural demand, supply, policy, and trade.

(242) Williams, Maurice J., International Labor Review, Nov.-Dec. 1982.

Prospects for Eliminating Hunger in the Face of World-wide Economic Recession

This paper discusses making food production a higher priority in the developing countries, combined with specific measures to reach the undernourished. It suggests that these goals must be supported by a concerted international effort to increase investment flows to achieve these objectives.

(243) Withell, Elizabeth R.; Porter, Donna V.; and Gilmore, Cathy, Environment and Natural Resources Policy Division, Congressional Research Service, Library of Congress, January 25, 1982.

Salvaged Food: Background and Analysis

This paper examines the issues surrounding human use of surplus and salvaged food in the United States. It highlights the extent to which food is wasted, discusses efforts to distribute surplus food, examines congressional interest in this means of providing food assistance, and summarizes the policy implications for taking such action.

(244) Woods, Richard G., Winrock International, Westview Press, Boulder, CO 1981.

Future Dimensions of World Food and Population

This collection of papers given by experts participating in the Congressional Roundtable on World Food and Population during 1979–80 covers the relationship of food population, potential food sources, the process of agricultural development, the influence of trade and development, and consequences for America.

(245) World Bank, Washington, DC, 1981.

Accelerated Development in Sub-Saharan Africa

The report discusses factors that explain slow economic growth in Africa in the recent past, analyzes policy changes and program orientation needed to promote faster growth, and concludes with a set of recommendations to donors. Its agenda for action is general; it indicates broad policy and program directions, overall priorities for action, and key areas for donor attention.

(246) World Bank, Oxford University Press, New York, 1984.

World Development Report, 1984

Each annual report on world development issues focuses on different aspects of development. Poverty-oriented approaches, trade and aid inter-relationships, economic policy choices of less-developed countries, food availability, and population prospects are among the topics discussed.

(247) World Food Council, United Nations, March 7, 1984.

Renewal of the Commitment for the Eradication of Hunger-Specific Measures for Council Consideration

This working paper offers a brief synthesis of current views about the world food situation, and suggests tasks which must be addressed to eliminate hunger within the framework of a more responsive and dynamic global food economy.

(248) World Food Council, United Nations, Annual Reports, 1975–83.

Report of the World Food Council—General Assembly

These reports summarize the proceedings of the World Food Council annual assembly meetings. They review the world food situation, and outline a program of action for the Council.

(249) World Food Council, United Nations Publications, November 1974.

Report of the World Food Conference

This report reviews the resolutions adopted and outlines the proceedings of the conference.

(250) World Food Council, United Nations Publications, February 10, 1984.

World Food and Hunger Problem: Changing Perspectives and Possibilities, 1974–1984

This is a special assessment report on progress in meeting food objectives of the 1974 World Food Conference requested by Ministers of the United Nations World Food Council.

(251) Wortman, Sterling, and Cummings, Ralph, Johns Hopkins University Press, Baltimore, MD, 1978.

To Feed This World

This book addresses the food-poverty-population problems in less-developed countries. Issues such as achieving food/population balances, the role of agricultural development, the adequacies of physical resources, and strategies for planning methods for more effective assistance are addressed.

(252) Yently, Mervin J., and Tun, Sovan, Staff Report, International Economics Division, Economic Research Service, U.S. Dept. of Agriculture, August 1981.

Household Demand Analysis for Assessing Nutritional Impact of Development Programs

This paper analyses a procedure developed for estimating a full matrix of demand elasticities for a developing economy using household survey data. The results, as applied to Sri Lanka, show that the estimates appear to be reasonable in magnitude and internally consistent.

B. Effectiveness of International Programs

1. U.S. government programs

a. AID Development Programs

(253) Agency for International Development, Washington, DC, January 30, 1984.

AID Nutrition Strategy

This paper outlines the strategy being followed in implementing AID nutrition assistance policy.

(254) Agency for International Development, Washington, DC, May 1982.

Food and Agricultural Development

This policy paper outlines AID's approach to food and agricultural development in the countries which it serves.

(255) Agency for International Development, Washington, DC, August 1981.

Growth, Poverty Alleviation, and Foreign Assistance

The main thesis of this paper is that the persistence of widespread absolute poverty despite rapid growth of GNP in LDC's as a group results not so much from inadequate patterns of growth within countries as from inadequate patterns of growth among countries. Furthermore, while most of the developing world's poverty problem is heavily concentrated in low-income countries, concessional foreign assistance is directed primarily toward middle-income countries. The paper analyzes the distribution of poverty among groups of countries, classified according to per capita income.

(256) Agency for International Development, June 1983.

Implementation of Section 128 of the Foreign Assistance Act of 1961, as amended—The Targeted Aid Amendment Report

This report to Congress summarizes AID's efforts to meet the mandate of the targeted Development Aid Amendment of 1982.

(257) Agency for International Development, Washington, DC, May 1982.

Nutrition: AID Policy Paper

This policy paper refers to the magnitude of the malnutrition problem in the world at the present time. Summarizes the rationale for U.S. efforts to improve nutrition in developing countries, and states the agency policy to maximize the nutritional impact of U.S. economic assistance.

(258) Agency for International Development, April 1, 1980.

Report to the Congress on Title XII—Famine Prevention and Freedom From Hunger

This fourth report to the Congress on the development of title XII programs (agricultural research), covers activities of fiscal year 1979.

(259) Agency for International Development, Technical Program Committee for Agriculture, 1981.

Strategy for Focusing AID's Anti-Hunger Efforts

This working paper responds to the Presidential Commission on World Hunger Report, and discusses the development issues that the report raises for AID's agricultural programs, policies, and capabilities.

(260) Mellor, John W., International Food Policy Research Institute, Washington, DC, 1984 (Reprint from Food and Nutrition, Vol. 10, No. 1, 1984).

Food Aid: Reflections on a Decade of Action

This article provides a statistical data on bilateral and multilateral food aid since the early 1960's. It then analyzes the impact of food-aid on economic growth, nutrition, employment, and consumption stability in the developing countries.

(261) Office of Nutrition, Bureau of Science and Technology, Agency for International Development, Washington, DC, December 1982.

Maternal and Infant Nutrition

This report describes the activities of AID in the area of improving maternal and infant feeding practices. The report provides background information on the development programming in this area and information on specific projects.

(262) U.S. General Accounting Office, July 22, 1983.

AID Assistance to the Eastern Caribbean: Program Changes and Possible Consequences

This document looks at AID assistance which is provided to the small nations of the Eastern Caribbean.

(263) U.S. General Accounting Office, October 16, 1981.

AID and Universities Have Yet to Forge An Effective Partnership to Combat World Food Problems

This report reviews the development of the BIFAD Program from 1975 to 1980. Recommendations for AID policy and management actions are included.

(264) U.S. General Accounting Office, February 29, 1984.

AID Needs to Strengthen Management of Commodity Import Programs

GAO recommends specific action to improve management of Commodity Import Programs, including additional guidance for planning and evaluating these programs and monitoring their implementation.

(*265*) U.S. General Accounting Office, August 29, 1983.

Irrigation Assistance to Developing Countries Should Require Stronger Commitments to Operation and Maintenance.

This document addresses several problems affecting the performance of irrigation systems in Asia (Sri Lanka, Thailand, and Indonesia).

(*266*) U.S. General Accounting Office, April 28, 1981.

Management Problems with AID's Health-Care Projects Impede Success

This GAO review notes design and implementation problems with a number of health-care projects financed by the Agency for International Development. GAO makes recommendations to alleviate the management problems encountered.

(*267*) U.S. General Accounting Office, February 21, 1984.

Meeting A Basic Human Need: AID's Rural Potable Water and Sanitation Program

This report makes recommendations for improving implementation of AID's water and sanitation programs, and identifies improvements resulting from this type of assistance.

(*268*) U.S. General Acounting Office, December 29, 1978.

Population Growth Problem in Developing Countries: Coordinated Assistance Essential

This report examines rapid population growth in developing countries and the assistance needed to help slow population growth in these countries. GAO recommends that the Agency for International Development work with the other major contributors and the developing countries to improve coordination, to reach agreement on leadership, strategy, and program responsibility, and to make sure that all participants are adequately informed of each other's activities.

(*269*) U.S. General Accounting Office, March 29, 1979.

U.S. Development Assistance to the Sahel—Progress and Problems

This report makes recommendations for improving AID's missions in the drought-stricken countries of Central and West Africa.

b. Public Law 480 Programs

(*270*) Agency for International Development, March 30, 1982.

Report to Congress on the Development Impact of Public Law 480

This report examines opportunities for strengthening the development impact of food aid programs, assesses the impact of pro-

grams to date, identifies the major constraints to realizing Public Law 480's developmental potential and outlines a strategy for the future. It examines in depth the relationship of Public Law 480 terms and rates to the development objectives of food aid.

(271) Blandford, David, and von Plocki, J. A., Cornell University Press, Ithaca, NY 1977.

Evaluating the Disincentive Effect of Public Law 480 Food Aid; the Indian Case Reconsidered

This paper develops an econometric model to calculate the disincentive effect of the Public Law 480 Program. The model appears to lend support to the argument that food aid does not have a universally beneficial impact upon recipient nation's economy.

(272) Blue, Richard N., and Dunlop, David W., Agency for International Development, June 1983.

P.L. 480 Title I: The Egyptian Case

The history and impacts of the Public Law 480 title I program in Egypt are assessed in light of the Government of Egypt policies and food needs. Also assessed is the program's impact on U.S. objectives.

(273) Blumenfield, Maria B. Flores, et al, Agency for International Development, August 1982.

P.L. 480 Title II: A study of the Impact of a Food Assistance Program in the Philippines

This evaluation assesses the nutritional impact, cost-effectiveness, and achievements of AID's Public Law 480, title II program in the Philippines and provides information to enhance the program's effectiveness.

(274) Clay, Edward J., and Pryor, Jane, University of Sussex, Institute of Development Studies, November 1982.

Food Aid: Issues and Policies

This study reviews issues related to food aid, and discusses policy implications for financing, disaster assistance, and international economics.

(275) Clay, Edward J., and Singer, Hans W., Bureau for Program and Policy Coordination, Office of Evaluation, Agency for International Development, December 1982.

Food Aid and Development: The Impact and Effectiveness of Bilateral Public Law 480 Title I—Type Assistance

This report surveys existing literature on the Public Law 480 program to assess the direct and developmental impacts of program food aid (titles I and III), on recipient countries.

(276) Foreign Agricultural Service, U.S. Dept. of Agriculture, November 1982.

Food for Peace: 1981 Annual Report on Public Law 480

Annual reports on the activities of the Department of Agriculture's food aid program outlines the goals of the program and the activities which were carried out during each fiscal year.

(277) Gilmore, J.W., and Adelman, Carol C., et al., Agency for International Development, 1980.

Morocco: Food and Aid and Nutrition Education

In this report the impact of nutrition education in Catholic Relief Services' title II food program is described.

(278) Hullander, Edwin L.; Zank, Neal S.; and Leachman, Christine A., Agency for International Development, November 2, 1982.

Financial Leverage Potential of Local Currency Proceeds Generated from the Food for Peace Program to Stimulate Private Enterprise in Developing Countries

Approximately half a billion dollars of local currency generated annually from the sale of Public Law 480, title I commodities worldwide could be programmed to stimulate host country private sector growth and attract foreign enterprise. Such economic leverage potential is analyzed in this paper.

(279) Isenman, P.J., and Singer, Hans W., Agency for International Development, 1975.

Food Aid: Disincentive Effects and Their Policy Implications

This is a review of the issues and literature concerning the disadvantages of food aid, with India as a model.

(280) McClelland, Donald G., Agency for International Development, July 1981.

Food Aid and Development: A Policy Discussion Paper

This paper discusses measures to ensure that food aid will complement an equitable growth strategy, and sets forth corresponding program implications for A.I.D.

(281) Myers, Beverlee A., Agency for International Development, October 1983.

Retrospective Study of the Special Supplemental Food Resource

Peru's experience with Public Law 480, title I food aid provides some important lessons, especially regarding AID's success in integrating title I into overall AID assistance. The title I program's in-country context, key elements, and impacts in Peru are reviewed.

(282) Reutlinger, Shlomo, World Bank, Washington, DC, August 1983.

Project Food Aid and Equitable Growth: Income Transfer Efficiency First

This discussion paper relates to food aid as a transfer of income and the need to make it more efficient.

(283) Reutlinger, Shlomo, and Katona-Apte, Judith, World Bank, Washington, DC, September 1983.

The Nutritional Impact of Food Aid: Criteria for the Selection of Cost Effective Foods

This discussion paper deals with the belief that aid in kind, particularly food, is preferable to cash because the former is nutritionally more effective as recipients allocate larger share of their resources to food than they would if provided cash.

(284) Russell, Paul, and Dijkerman, Dirk, et al., Agency for International Development, March 1980.

Food for Development in Sub-Sahara Africa

This staff working paper reviews Public Law 480 programs in Africa, assesses program and policy considerations, analyzes each country situation, and ranks them in priority of food aid needs.

(285) Sidman, Barry; Crosswell, Michael; Wilkinson, John; Blott, Fred; and Fisher, Milton, Agency for International Development, February 1984.

Jamaica: The Impact and Effectiveness of Public Law 480 Title I Program

This report summarizes the impact of the title I program as it operated in Jamaica from 1975–80. Various aspects of the program relating to the self-help agreements and overall impact on the economy and nutritional status of the population are examined.

(286) Steinberg, David I., and Adamczyk, Christine, Agency for International Development, October 1982.

Sri Lanka: The Impact of P.L. 480 Title I Food Assistance

This impact evaluation of the Public Law 480, title I program in Sri Lanka is the first in a series of countries Public Law 480–I studies.

(287) U.S. General Accounting Office, 1980.

Search for Options in the Troubled Food-For-Peace Program in Zaire

This review of the fiscal year 1978 rice distribution in Zaire was requested in response to serious abuse in the Food for Peace Program. Program alternatives are explored.

(288) U.S. General Accounting Office, 1979.

Changes Needed in the Administration of the Overseas Food Donation Program

This report shows shortcomings in Public Law 480 title II program focus and implementation, and suggests the need for substantial program changes.

2. INTERNATIONAL PROGRAMS

a. Bilateral Assistance

(289) Crowley, Paul R., Office of International Cooperation and Development, U.S. Dept. of Agriculture, 1980.

Food Fortification: Development of Food Fortification Programs

This paper focuses on steps to foster and accelerate the use of food fortification by citing previous programs and suggesting ways to develop new ones.

(290) Lappe, Frances Moore, Collins, Joseph, and Kinley, David, Institute for Food and Development Policy, San Francisco, CA 1980.

Aid As Obstacle: Twenty Questions About Our Foreign Aid and The Hungry

This book concludes that the causes of hunger and rural poverty are not overpopulation, scarcity of agricultural resources, or lack of modern technology. It states that the root causes of hunger is the increasing concentration of control over food-producing resources in the hands of fewer and fewer people.

(291) Nightingale, Ray W., Urban, Francis S.; and Hanrahan, Charles E., Staff Report, Economic Research Service, U.S. Dept. of Agriculture, May 1982.

U.S. Foreign Assistance to Agriculture: A Proposed Redirection

This report suggests changing attitudes toward international assistance and decreased development financing necessitate new programming approaches to ensure effective utilization of limited resources.

(292) Sewell, John W., and Mathieson, John A., Overseas Development Council, Washington, DC, May 1982.

The Ties That Bind: U.S. Interests and Third World Development

This study analyzes the major issues shaping US. foreign assistance in early 1980's.

(293) Spitzer, Robert, The Interstate Printers & Publishers, Inc., Danville, IL, 1981.

No Need for Hunger: How the U.S. Can Help the World's Hungry to Help Themselves

This book addresses the history of U.S. food assistance and makes recommendations for future U.S. involvement in developing countries.

(294) U.S. General Accounting Office, November 26, 1975.

Disincentives to Agricultural Production in Developing Countries: Report to Congress by the Comptroller

This GAO report covers the need for recipients of economic assistance from the United States to provide an environment conducive to the effective use of that aid. It specifically discusses the need of recipient governments to provide incentives for increased agricultural production.

(295) U.S. General Accounting Office, April 22, 1976.

Impact of U.S. Development and Food Aid In Selected Developing Countries.

From its limited study of the impact of U.S. developmental food aid in the Philippines, India, Korea, and Chile, GAO found that foreign aid officials had relatively little information on the most needy persons in those countries. Thus, GAO could not establish clearly the extent U.S. programs were benefitting the most needy people. The report offers some solutions.

(296) World Hunger Working Group, U.S. Government Printing Office, Spring 1978.

World Hunger and Malnutrition: Improving the U.S. Response—Report to the President by the World Hunger Working Group

Following a Presidential mandate, this report raises the major issues related to U.S. Government support for international food and agricultural policies and suggests actions to improve U.S. responsibilities in this area.

b. Multilateral Assistance

(297) Gran, Guy, Praeger, New York, NY, 1983.

Development by People

This book is an examination of the outlooks, structures, and procedures of international donor agencies. It critiques the World Bank, the IMF, and U.S. AID. It advocates people-oriented approaches to development at the community level, and describes strategies for participatory development.

(298) International Development Institutions and Finance Subcommittee, Banking, Finance and Urban Affairs Committee, U.S. House of Representatives, May 5, and July 16, 1981.

Targeting Assistance to the Needy

Series of discussions on whether the United States should urge the multilateral development banks to concentrate at least half their assistance on projects which directly help the poor.

(299) International Development Institutions and Finance Subcommittee, Banking, Finance and Urban Affairs Committee, U.S. House of Representatives, March 11, 1981.

U.S. Participation in the Multilateral Development Institutions

In this hearing, Deputy Secretary of the Treasury, R.T. McNamara and Deputy Assistant Secretary of State, Bureau of Economic and Business Affairs explain the administration's budget submission for U.S. contributions to the multilateral development agencies. Topics discussed include U.S. participation and the introduction of nonregional membership and support of the African Development Bank.

(300) International Development Institutions and Finance Subcommittee, Banking, Finance and Urban Affairs Committee, U.S. House of Representatives, April 18 and 20, 1983.

U.S. Participation in the Multilateral Development Institutions

These hearings were called to discuss legislation authorizing new U.S. contributions to several of the regional multilateral development institutions including the African Development Bank, Asian Development Bank, and Inter-American Development Bank.

(301) Knight, Peter T., World Bank Washington, DC, July 1980.

Implementing Programs of Human Development

Political support, finance, administration, and demand are crucial linked factors in improving education, health, hygiene, and nutrition, especially in the poorest areas of the developing nations. This set of papers discusses these issues from the perspectives of political science, public finance, public administration, sociology, and anthropology.

(302) Payer, Cherl, Penguin Books, New York, NY, 1974.

The Debt Trap: The IMF and the Third World

This book is about "the efforts of poor nations to gain some control over thier own economies, and the role of the IMF in frustrating those attempts," according to the author.

(303) United Nations World Food Council, February 1, 1984.

Progress Toward the Eradication of Hunger—A Multilateral Decade for Food, 1974—1984. Executive Summary and Conclusions.

The United Nations World Food Council provided a progress report on the achievements of the multilateral development agencies in meeting the 1974 World Food Conference goal to eradicate hunger in 10 years. The report reviews the activities of the agencies as an essential element in implementing the World Food Conference resolutions concerning world food problem.

(304) World Bank, Washington, DC, 1982.

IDA in Retrospect

This study reviews the activities of the International Development Association from 1960–82 in meeting developmental objectives in the poorest nations.

(305) World Bank, Washington, DC, February 1983.

Focus on Poverty

The book examines the program and policy guidelines that the World Bank has adopted during the 1970's which seek to meet the needs of the poor majority in less-developed countries.

c. Emergency Assistance

(306) Sarma, J. S., International Food Policy Research Institute, Washington DC, April 1983.

Contingency Planning for Famines and Other Acute Food Shortages: A Brief Review

This paper reviews issues of food distribution and management of food emergency situations.

(307) Sheets, Hal, and Morris, Roger, Carnegie Endowment for International Peace, Washington, DC, 1974.

Disaster in the Desert: Failures of International Relief in the West African Drought

This report details the problems of planning, coordination, cooperation, monitoring and evaluation of disaster relief by describing the response of the United States and the United Nations to the tragedy in the Sahel in the 1972–74 period.

(308) Shepherd, Jack, Carnegie Endowment for International Peace, Washington, DC 1975.

The Politics of Starvation

This book describes problems of emergency assistance and the spread of famine in Ethiopia in the early 1970's. It details political obstacles and bureaucratic inefficiencies involving the Ethiopian Government and the international relief agencies.

(309) Business International Corporation for the Bureau for Private Enterprise, Agency for International Development, 1984.

The Optimum Role of the Private Sector in the Agricultural Development of LDC's. An Investigation of the Entrepreneurial and Developmental Dynamics of Small Producers Organized Around a Corporate Core.

This 13 part study contains policy recommendations on the role of the private sector in energizing small farmers in the Third World. It includes policy recommendations; new concepts for the role of agribusiness in accelerating development; 10 case studies of diverse types of agribusiness activities overseas; and an inventory of private sector agribusiness undertakings in developing countries.

(310) Cooperative for American Relief Everywhere, Inc. (CARE), New York, NY 1976.

Rural Food Habits in Six Developing Countries

This report presents the results of a study on CARE's involvement with preschool nutrition programs in six selected countries. Implications for food aid policies are discussed.

(311) Deshields, Ann P.; Driscoll, Robert E.; and Kramm, Sherron D., Fund for Multinational Management Education, New York, January 15, 1982.

Special Development Programs of U.S. Business in the Third World

An examination of U.S. business involvement in Third World development programs, compiling case histories of firms which establish a presence in a developing country in order to conduct business.

(312) Freeman, Orville L., and Karen, Ruth, Technological Forecasting and Social Change, Vol. 22, October 1982.

The Farmer and the Money Economy: The Role of the Private Sector in Agricultural Development of Less Developed Countries

The most effective method for needed increases in productivity in less-developed countries is involvement of the private sector, specifically the participation of small land holders working 1–5 acres, grouped around a corporate core. The corporate core provides technical, educational, and financial inputs, processes, and/or markets the output.

(313) George, Susan, Institute for Policy Studies, 1978.

Feeding the Few: Corporate Control of Food

This book examines the structure of the U.S. food system through which food moves from the farm to the final consumer. The book then explains how this agricultural system is being imposed on less-developed countries by multinational agribusiness.

(314) Sommer, John G., Overseas Development Council, Washington, DC, 1977.

Beyond Charity: U.S. Voluntary Aid for a Changing Third World

This work examines the impact of different types of U.S. private and voluntary organizations overseas and formulates recommendations based upon the criterion of how well they mobilize the poorest in less-developed countries.

(315) Tavis, Lee A., University of Notre Dame Press, Notre Dame, IN, 1982.

Multinational Managers and Poverty in the Third World

Papers presented in a series of workshops during 1978–80 which cover the following issues: the poverty issue and how it relates to the environment of the multinational corporation; how multinationals can and should respond to poverty within the confines of the national and international environments; a case history of the Dole pineapple-raising operation in the southern Philippines; and a brief outline of the nature of the debate concerning the presence of multinational corporations in Third World countries.

(316) Truitt, George, Fund for Multinational Management Education, New York, 1984.

Conference Report: Executive Workshop on Agribusiness and Agriculture, Tocomen, Panama, September 23–25, 1983. Organized by Chamber of Commerce, Industry and Agriculture of Panama and Fund for Multinational Management Education, New York.

This is a report of a workshop bringing together participants from Panamanian organizations and foreign organizations with the objectives of: (1) deepening the understanding of relations between agribusiness and farmers, and (2) defining some concrete opportunities for new agribusiness projects in Panama. It was one of four FMME workshops following upon 1981 conference on multinationals.

(317) Truitt, George A., Fund for Multinational Management Education, New York, 1981.

Multinationals: New Approaches to Agricultural and Rural Development

This conference report discusses ways in which corporations, governments, and farmers of limited resources can cooperate more effectively in agricultural and rural development. Through case studies and workshops factors leading to successful involvement of corporations in development were analyzed.

(318) Wattles, Charles W., and Micou, Ann, A. T. International, Washington, DC, 1983.

A Resource Guide to Corporate Involvement in Development in the Third World

This resource guide contains summaries of corporate programs overseas, summaries of PVO/corporate cooperative efforts, a resource list of individuals and groups that can answer questions or refer to others with additional information, an annotated bibliography and a concept paper and typology of business activities.

4. HEALTH AND NUTRITION

(319) American Public Health Association, Washington, DC, 1981.

Primary Health Care Issues: Growth Monitoring

This state-of-the-art review of growth monitoring shows planners how to maximize benefits through various methods and techniques.

(320) Anderson, Mary A., and Austin, James E., et al., Institute for International Development, Harvard University, Cambridge, MA, 1981.

Nutrition Intervention in Developing Countries—Study I

This study provides guidance to planners designing and evaluating supplementary feeding programs in developing countries.

(321) Austin, James E., and Zeitlin, Marian F., et al., Institute for International Development, Harvard University, Cambridge, MA, 1981.

Nutrition Intervention in Developing Countries Study V & VI

This study analyzes impacts of agricultural and food price subsidy policies on the nutritional status of the poor.

(322) Austin, James E., et al., Oelgeschlager, Gunn & Hahn Publishers, Cambridge, MA, 1981.

Nutrition Intervention in Developing Countries: Study I Supplementary Feeding

An analysis of supplemental feeding programs based on field research conducted by CARE under the sponsorship of the Agency for International Development.

(323) Austin, James E., et al., Oelgeschlager, Gunn & Hahn Publishers, Cambridge, MA, 1981.

Nutrition Intervention in Developing Countries: Study III Fortification

This review summarizes the use of nutrition fortification in developing countries as well as its effectiveness in alleviating specific nutrient intake deficits.

(*324*) Austin, James E., et al, Oelgeschlager, Gunn & Hahn Publishers, Cambridge, MA 1981.

Nutrition Intervention in Developing Countries: Study IV Formulated Food

This review demonstrates the planning, implementation, and evaluation of a vitamin A fortification program. It compares the fortification approach with distribution of mass nutrient doses and public health horticulture programs.

(*325*) Austin, James E., et al, Oelgeschlager, Gunn & Hahn Publishers, Cambridge, MA, 1981.

Nutrition Intervention in Developing Countries: Study VII Integrated Nutrition and Primary Health Care Programs

This review examines nutrition interventions which are integrated with one or more of the following services: health, family planning, water supply, and/or sanitation.

(*326*) Austin, James E., and Zeitlin, Marian F., Oelgeschlager, Gunn & Hahn Publishers, Cambridge, MA, 1981.

Nutrition Intervention in Developing Countries

A review of nutrition planning studies on seven major nutrition interventions in developing countries: supplementary feeding, nutrition education, food fortification, formulated foods, consumer price subsidies, agricultural production, and nutrition programs integrated with other community services.

(*327*) Beaton, George, and Ghassemi, Hossein, The American Journal of Clinical Nutrition, Vol. 35, No. 4, Supplement 1982.

Supplemental Feeding Program for Young Children in Developing Countries

A review of over 200 reports examining the effectiveness and costs of supplemental food distribution programs for young children in developing countries.

(*328*) Berg, Alan, World Bank, Series: Poverty and Basic Needs, June 1981.

Malnourished People: A Policy View

The concern of this study is with actions that can lessen malnutrition within the present generation.

(*329*) Chandler, William, Worldwatch Institute, Washington, DC 1984.

Improving World Health: A Least Cost Strategy

This paper reviews health care measures which, if applied widely, would significantly improve world health at low cost. Comparisons and cost estimates are included.

(*330*) Chandler, William U., Worldwatch Institute, Worldwatch Paper 64, Washington, DC, June 1985.

Investing in Children

This paper discusses the prevalence and causes of infant and child mortality, malnutrition, and child health problems in developing countries. This author presents case studies of integrated development initiatives including primary education health care, clean drinking water, water for hygiene, and agricultural reform projects.

(*331*) Edirisinghe, Neville, International Food Policy Research Institute, Washington, DC, February 1985.

Preliminary Report on the Food Stamp Scheme in Sri Lanka (draft only, submitted for publication)

An evaluation of the current Food Scheme in Sir Lanka with recommendations for program modifications to increase nutritional benefits for those most in need.

(*332*) Faruquee, Rashid, and Johnson, Ethna, World Bank, Washington, DC, 1982.

Health, Nutrition, and Family Planning in India: A Survey of Experiments and Special Projects

This paper, a World Bank collaboration with Johns Hopkins University, analyzes data collected from field experiments on integrat-

ed health, nutrition, and family planning provided from 1969 to 1974 in Narangwal, India.

(333) Faruquee, Rashid, and Johnson, Ethna, World Bank, February 1982.

Health, Nutrition and Family Planning in India: A Survey of Experiments and Special Projects

An analysis of the impact of 14 projects in India dealing with health, nutrition, and family planning. An attempt is made to calculate the program costs per death avoided.

(334) Ferry, Benoit, World Fertility Survey Comparative Studies, Cross National Summaries No. 13, International Statistical Institute, The Hague, Netherlands, May 1981.

Breast-feeding

This report presents data from the World Fertility Survey on patterns of breastfeeding from 19 countries in Asia, the Pacific, Latin America, and the Caribbean. The data is presented by age of the mothers, age of the child, child survival, sex of the child, and the birth order.

(335) Food and Nutrition Policy Planning Division, Colombo, Sri Lanka, Publication No. 7, 1981.

Evaluation Report of the Food Stamp Scheme

This Sri Lankan Government report evaluates the Food Stamp Scheme as to its administration, financial and social costs, and program effectiveness. A comparison is made of direct income transfer versus food stamps.

(336) Golladay, F., and Liese, B., World Bank, Washington, DC, 1980.

Health Issues and Policies in the Developing Countries

This paper focuses on the principle health policy issues facing developing countries over the next two decades. It also examines problems in the organization and operation of basic health services and the financing of health care.

(337) Gray, Cheryl Williamson, International Food Policy Research Institute, Washington, DC, September 1982.

Food Consumption Parameters for Brazil and Their Application To Food Policy

This study analyzes measures of malnutrition to determine their usefulness in revising national food policies.

(338) Gwatkin, D., et al., World Bank, Washington, DC, 1980.

Can Health and Nutrition Interventions Make A Difference?

This study evaluates the impact on health status of 10 health and nutrition projects to identify key interventions.

(339) Hamilton, Sahni; Poplin, Barry M.; and Spicer, Deborah, Praeger Special Studies, NY, and Bergin and Garvey Publishers, Inc., Hadley, MA, 1984.

Women and Nutrition in Third World Countries

A review of the current state of nutrition research and practice among women in the reproductive years in developing countries. Authors identify areas for future research and policy and program development.

(340) Helen Keller International, New York, NY, 1983.

Research Priorities for the Prevention of Blindness in Developing Countries

A nonprofit foundation provides information and recommendations for programs to prevent blindness in developing nations.

(341) Kennedy, Eileen T., and Alderman, Harold H., International Food Policy Research Institute, Washington, DC, 1985.

Comparative Analyses of Nutritional Effectiveness of Selected Interventions

Evaluates the costs and effectiveness of health and nutrition intervention programs in addressing the nutrition problems of the maternal, infant, and child populations in developing countries.

(342) Kennedy, Eileen T., and Pinstrup-Andersen, P., International Food Policy Research Institute, Washington, DC, February 1983.

Nutrition-Related Policies and Programs: Past Performances and Research Needs

This paper reviews the knowledge gaps and research needs for designing and implementing effective and efficient nutrition-related programs and policies.

(343) Kielmann, Arnfried A.; Taylor, Carl E.; and Parker, Robert L., The American Journal of Clinical Nutrition, Vol. 31, No. 11, pp. 2040–52, 1978.

The Narangwal Nutrition Study: A Summary Review

Examines nutrition, health, and integrated programs conducted in 10 villages of Punjab, North India where undernutrition and infectious diseases are very common.

(344) Kocher, J., and Cash, R., Harvard Institute for International Development, Publication Office, Cambridge, MA, 1979.

Achieving Health and Nutritional Objectives Within a Basic Needs Framework

Health and nutritional determinants of primary health care programs are the focus of this paper. It analyzes delivery systems, methods of establishing priorities, and policymaking.

(345) Mayer, Jean, and Dwyer, Johanna T., Oxford University Press, 1979.

Food and Nutrition Policy in a Changing World

This book provides an introduction to the types of considerations involved in formulating food and nutrition policy in developing countries, with particular reference to the young child.

(346) Newell, K., Ed., World Health Organization, 1975.

Health by the People

This is a description of the nine innovative health programs which have been influential in the primary health care movement.

(347) Notzon, Francis, Pediatrics 74(4) Suppl: 648–666, 1984.

Trends in Infant Feeding in Developing Countries

This report reviews breast-feeding trends in low-income countries, based on national-level studies with information on selected subgroups. The author also reviews the national-level data for cross-sectional differences in breast-feeding practices. Available information on timing and types of food given to infants to supplement breastmilk is also examined.

(348) Office of Nutrition, Harvard Institute for International Development, Development Support Bureau, Agency for International Development 1981.

Nutrition Intervention in Developing Countries

This overview volume is a synopsis of a literative review of nutrition interventions designed to provide guidance to professionals in developing countries, in international agencies, and in research institutions involved in planning, designing, funding, operating, or evaluating nutrition programs. These studies distill and consolidate much of the existing nutrition program information into a single set of documents which represent an assessment of the state-of-the-art of nutrition programs.

(349) Pinstrup-Andersen, P., World Bank, Washington, DC, May 1981.

Nutritional Consequences of Argicultural Projects: Conceptual Relationships and Assessment Approaches

This paper provides a survey of past and ongoing activities aimed at the incorporation of nutritional considerations into agricultural and rural development projects and policies.

(350) Popkin, Barry M.; Bilsborrow, Richard E.; and Akin, John S., Science, 218: 1088–1093, December 10, 1982.

Breast-Feeding Patterns in Low-Income Countries

This article reviews studies of breast-feeding patterns (frequency, degree, and duration), in 17 developing countries in Asia and the Pacific, Africa and the Near East, and Latin America.

(351) Sabin, E., and Stinson, W., American Public Health Association, Washington, DC, 1981.

Immunizations in Primary Health Care

This paper describes the World Health Organization's expanded program on immunization and summarizes published information on the effectiveness and costs of immunization programs.

(352) Sahn, David E., and Pestronk, Robert E., Office of Nutrition, Bureau for Development Support, and Office of Evaluation, Bureau for Program and Policy, Agency for International Development, July 1981.

A Review of Issues in Nutrition Program Evaluation

This review explores the experiences and methodologies employed in evaluating nutrition programs in developing countries. Nutrition programs are explained using a nutrient flow model

which depicts the nutrients available for individual consumption as a function of a number of processes.

(353) Subcommittee on Maternal and Infant Nutrition in Developing Countries, National Research Council, National Academy Press, 1983.

Maternal and Infant Nutrition in Developing Countries with Special Reference to Possible Intervention Programs in the Context of Health

This report reviews and evaluates the scientific basis of maternal nutrition and infant and young child feeding practices especially those aspects that may form the basis for interventions.

(354) The Rockefeller Foundation, New York, NY, June 1984.

Protecting the World's Children: Vaccines and Immunization Within Primary Health Care

These proceedings of an international conference sponsored by the World Health Organization, UNICEF, the World Bank, the U.N. Development Program, and the Rockefeller Foundation report on the need for and ability to expand health care in the developing countries.

(355) UNICEF News, UNICEF Information Division, United Nations, New York, NY, 1979.

Child Nutrition

This booklet explains aspects of the causes of malnutrition and actions to alleviate malnutrition and prevent its occurrence.

(356) World Health Organization, Geneva, Switzerland, 1980.

Toward A Better Future: Maternal and Child Health

This study examines the causes and degree of risk of maternal, infant and childhood illness and death, and discusses possible interventions.

(357) Zeitlin, Marian F., and Formacion, Candeleria, Oelgeschlager, Gunn & Hahn Publishers, Cambridge, MA, 1981.

Nutrition Intervention in Developing Countries: Study II Nutrition Education

Evaluates nutrition education program design and effectiveness in different developing nations.

5. FOREIGN POLICY

(358) Brown, Lester R., Worldwatch Institute, Worldwatch Institute Paper, Washington DC 1975.

The Politics and Responsibility of the North American Breadbasket

This paper discusses the role of the United States as a grain exporter to developing countries. It examines probable increases in demand for food grains and the reasons for fluctuations of worldwide supply and demand.

(359) Gerster, Richard, Journal of World Trade Law, Vol. 16, Nov./Dec. 1982.

The IMF and Basic Needs Conditionality

This article describes IMF conditionality and its impact on basic human needs in countries receiving IMF assistance. It describes the attitudes of the Fund on issues of distribution, and the attitudes of the Congress and recent U.S. administrations on the Fund's policies with regard to basic human needs.

(360) Helleiner, G. K., American Economic Review, May 1983.

Lender of Early Resort: The IMF and the Poorest

This paper examines the "uniformity of treatment" question with respect to short-term balance of payments financing for various members of the IMF.

(361) Sewall, John; Farmberg, Kallab; and Valerina, Richard, Editors, Overseas Development Council, Praeger, New York, NY, 1984.

U.S. Foreign Policy and the Third World Agenda: 1985–86

Annual report addresses two questions: (1) how to recapture the benefits of "positive interdependence" that accrued to the industrialized world from growth and progress in the Third World during the 1970's, and (2) how to address the deteriorating prospects of the low-income countries—especially how to improve the quality of life of the very poorest people who live in those countries.

(362) U.S. General Accounting Office, September 8, 1983.

Africa's Agricultural Policies—A More Concerted Effort Will Be Needed If Reform Is Expected

GAO looks into the actions that AID and the United States have taken to promote policy reform.

6. TRADE POLICY

(363) Mathieson, John A., Overseas Development Council, Working Paper, May 1981.

Basic Needs and the New International Economic Order: An Opening for North-South Collaboration in the 1980's

This working paper reviews the premises underlying two development strategies, basic human needs and the new international economic order. It argues that the conflict between the two strategies lies in the assignment of accountability for lack of progress implied in each rationale.

(364) Morgan, Dan, The Viking Press, New York, NY., 1979.

Merchants of Grain

This book is a study of the politics of the international grain trade as conducted by seven privately held grain merchant houses. It details the nature of business practices and attitudes of those conducting international transactions in basic food crops. Also discussed are the effects of the corporate structure of this industry upon producers and consumers worldwide.

(365) Gormely, Patrick J.; Kennedy, T. E.; Chatwal, G. S., Kansas State University, Food and Feed Grain Institute, Manhattan, KS, 1977.

LDC Wheat Imports in 1985 and the Impact of Development Assistance on LDC Wheat Imports

This report projects 1985 wheat imports by less developed countries and analyzes the impact of development assistance on these imports.

(366) Perez, Lorenzo L., Bureau of Intragovernmental and International Affairs, Agency for International Development, 1978.

Trade Policies Toward Developing Countries: The Multilateral Trade Negotiations

This proceedings volume on the Conference of Multilateral Trade Negotiations contains papers, comments, and discussion on aspects of trade negotiations of importance to developing countries. Participants included academic experts, U.S. officials, and staff of international organizations.

(367) Phillips, Foster, Bureau for Technical Assistance, Agency for International Development, 1978.

Agricultural Policies and Rural Malnutrition

These studies examine agriculture policies and related development programs as they affect rural poor through changes in income, the economy, the price of food, demand patterns, and fertility.

(368) Ways and Means Committee, U.S. House of Representatives, June 9, 1983.

Caribbean Basin Economic Recovery Act

This hearing was held to discuss means to promote economic revitalization and facilitate expansion of economic opportunities in the Caribbean Basin Region.

7. CREDIT, POPULATION, AGRICULTURE, AND RELATED SOCIAL POLICIES

(369) Accion International/AITEC, Boston, MA, 1984.

Summary and Recommendations: Program for Investment in the Small Capital Enterprise Sector (PISCES), Phase I

A summary of findings from 3 years of research and program development on direct assistance to the smallest economic activities of the urban poor in communities in Africa, Asia, and Latin America. This effort was financed by the Agency for International Development, Office of Urban Development, Bureau for Science and Technology.

(370) Accion International/AITEC, Boston, MA, January 1985

First Phase: Packaging and Disseminating Micro-Enterprise Methodologies for Banks, Cooperatives and Other Financial Institutions

A technical paper outlining an 18-month research effort to be made by ACCION International to encourage the provision of loans by private financial institutions to fund micro-enterprises in developing countries.

(371) Ahmed, R., and Kumar, S., International Food Policy Research Institute, Washington, DC, 1985, Study in Progress

Evaluation of Food for Work Projects in Bangladesh

A joint study with the Bangladesh Institute of Development Studies of food for work projects in irrigation and flood control, both immediately and after 3 years. Study covers effect on agricultural production, income, employment, and consumption patterns.

(372) Cairnross, John, Development Research and Training Service, Policy Analysis Division, Food and Agriculture Organization, Rome, 1977.

An Approach to Food/Population Planning

This study looks at the relationship between food supply and population growth. The study focuses on three main areas: causes for declines in fertility; food and population planning; and modeling economic-demographic interactions.

(373) Dams, T.; Hunt, K. E.; and Tyler, G. J., International Association of Economists, Published by Saxon House, England, 1978.

Food and Population: Priorities in Decision Making

This book contains a series of studies on the balance between food production and population growth. The studies address such topics as agricultural production and population growth, achieving food and population balance in selected countries, food supply, and institutional constraints.

(374) Donovan, W. G., Cornell University, Dept. of Agricultural Economics, Occasional Paper No. 60, Ithaca, NY, 1973

Rural Work and Employment, Description and Preliminary Analysis of Land Army Report in Mysore State, India

A 46-page review of rural works in India with a study of the effects of a specific project on laborers, agricultural sector, roads, forest plantation, and expenditures.

(375) Eckholm, Erik P., W. W. Norton & Co., New York, NY, April 1976.

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This book discusses and provides examples of ecological deterioration which pose a serious threat to the world's capacity to feed itself in the futue.

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The PISCES Studies: Assisting the Smallest Economic Activities of the Urban Poor

Part I summarizes the research findings on programs for investment in the small capital enterprise sector in developing countries, matching assistance approaches with types of persons and enterprises needing to be assisted, their specific needs, and the institutional context in which the investment takes place. Part II through V consist of case studies of ongoing investment programs.

(377) Gordon, Marvin F., U.S. Bureau of the Census, 1975.

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This short monogram discusses the traditional question of population and food supply, the problems of food and food preparation, and possible alternatives in these fields to improve the quality and quantity available.

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Population Growth Problem In Developing Countries: Coordinated Assistance Essential

This report examines rapid population growth in developing countries and assistance needed to slow population growth. GAO recommends that the Agency for International Development work with the other major contributors and the developing countries to improve coordination and to reach agreement on leadership, strategy, and program responsibility.

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